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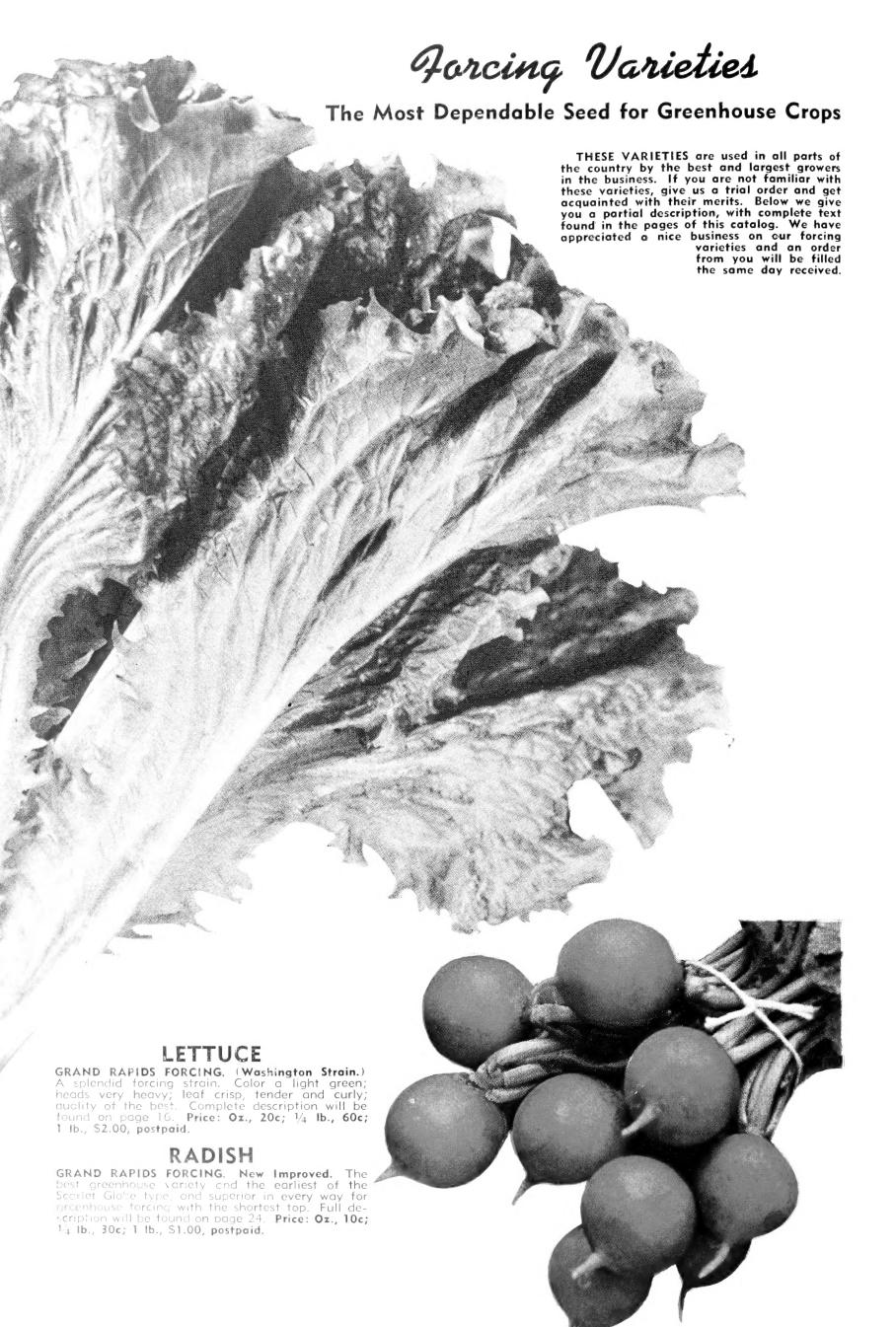
SEED ANNUAL RAIDIOS

CIPATRA CIPOWEPS, Inc.

SEED MERCHANTS

401-433 Ionia Ave. S. W.

GRAND RAPIDS, MICH.



1949 PLEASE USE THIS ORDER SHEET

GRAND RAPIDS GROWERS, Inc.

Grand Rapids, Michigan

State

Write very plainly.

Street, P. or Rural I	O. Box Delivery													
Express or	(If Dif	erent)												
rieight Of	iice C iioiii	P. O.) Forward God (Parcel Post,	Express, Freight or Boat)											
AMO	UNT ENCL	OSED Contemplate your seed purchases early and take following discounts on Garden Seeds only. Posi allowed after April 1st.	Contemplate your seed purchases early and take advantage of the following discounts on Garden Seeds only. Positively no discounts											
Money Ord	der \$	5% DISCOUNT—except on Peas, Beans and												
Draft or C	heck - \$	If your order amounts to \$ 10% DISCOUNT—except on Peas, Beans and If your order amounts to \$	Corn											
Postage Sto	amps - \$.,	This discount applies on spring orders of GARDEN S before APRIL 1st. Orders received after April 1st a	SEEDS only, if ordered											
Cash = -	· \$	anima Michigan Chata agles Asia will be abaseed when	re applicable. By must accompany											
More O	rder Blanks A	will be sent upon request. Always write letters on a separate shake Money Orders or Checks payable to Grand Rapids Growers,	eet from your order. Inc.											
have full re	dress at any a depends la	ested, and we guarantee the vitality and purity to the full amount of the protime if you are not satisfied with the results, but even with our quality satisfied upon cultivation, soil and weather conditions, therefore in no case actually paid for the seeds.	eeds, success in gardening											
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ORDER SHEET — Continued

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NAME	POSTOFFICE	COUNTY	STATE
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Grand Rapids Growers, Inc.

Twenty-Ninth Annual Seed Catalog

1949

Important

By Carefully Following These Suggestions, Many Mistakes Will Be Avoided

Order Blanks

Order blanks have been inserted in this catalog for your convenience. Please use them. Fill in your NAME, POST OFFICE, SHIPPING POINT or nearest EXPRESS OFFICE, your COUNTY and STATE, as this is as important in the prompt filling of your order as the order itself. Write plainly and avoid mistakes. Additional order blanks are mailed with every order. If you do not receive them, please notify us and we will be glad to furnish them tify us, and we will be glad to furnish them.

Terms

Our terms are strictly cash and we ask that you enclose your remittance with order. On all vegetables and flower seeds EXCEPT peas, beans and sweet corn, you may deduct 5% as your savings if your order amounts to \$1.00 or more, and 10% on all orders omounting to \$5.00 or more. This discount applies only on spring orders of garden seeds if ordered before April 1st. Orders received after April 1st are not subject to discount. This offer does not apply an special offer collections, bulbs or plants. does not apply on special offer collections, bulbs or plants.

This offer is good only in the U. S. A. and your remittance must accompany your order to entitle you to the discount. While we do not think there will be any serious changes, all prices quoted herein are made subject to change without notice. Michigan State Sales Tax will be charged where applicable.

How to Send Money

Remittance should be made by POSTAL MONEY ORDER, EXPRESS MONEY ORDER, BANK DRAFT or CERTIFIED CHECK. It is perfectly safe and your order will be assured of prompt handling. U. S. CURRENCY and U. S. POSTAGE STAMPS for small amounts, are acceptable but in this case the letter should be REGISTERED.

Canadian Customers (Notice)

We are very thankful for the business you have given us in the past and we will continue to give you our very best of service and quality seeds.

Please take special notice that we cannot make C. O. D. shipments to any part of Canada and cannot pay postage on any items of seed in this catalog above

We also ask that you make your remittance in United States funds as the discount on Canadian paper is far in excess of where it was and will not permit us to honor same at face yalue. You can, however, obtain a bank draft or money order payable in U. S. funds and will ask that you consult your banker or postmaster. Personal checks or currency are not acceptable.

Non-Warranty

We give no warranty, express or implied, as to the productiveness of any seeds we sell and we will not be in any way responsible for the crop. Our liability in all instances is limited to the purchase price of the seed.

Small Orders

Small orders are just as welcome as the larger ones and receive the same careful attention and prompt handling. All orders are filled the same day as received.

Large Quantities

Parties buying large quantities of any one variety of seed will be quoted special prices on application.

Price of Seeds By Weight

We will supply HALF POUNDS and over at the pound rate; less than half pound lots are charged at the quarter pound and ounce rate.

Safe Delivery

All seeds and supplies sent out by us are fully insured and we guarantee their safe arrival. If they are damaged, notify us immediately.

Postpaid Prices (Important)

We prepay postage on all vegetable and flower seeds in packets, ounces, cuarter pounds, half pounds and pounds at the prices quoted herein to any point of the United States or any of its possessions, and Canada; however, we do not pay postage on Beans, Corn or Peas beyond the "one pound" price; field seeds, Onion sets, miscellaneous supplies, or anything that is not specifically listed "postpaid." If such items are wanted by parcel post, add sufficient postage as per Parcel Post Rates given below.

Air Mail

On RUSH ORDERS received by air mail, wire or telephone for one ounce or more of seed, we will send by air mail if so requested at a normal charge of 6c per ounce of seed ordered, one ounce of seed would weigh more than one ounce when it is packed ready to mail. Where the mailing weight is less than one ounce we well pay the postage. On larger quantities the schedule is:

Per Pound Additional

ones	1													1	V	a	į	l	ing Weight	Pounds
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	8																		80c	65c

This will give you overnight service to almost any point in the continental U. S.

Weight Limit

The weight limit is now 70 lbs. anywhere in the United States, and we advise sending seeds by mail as the service is good: however, on shipments of 20 lbs. and over it is cheaper to send by express, beyond the third zone.

Parcel Post Rates		Jan. 1st Up to and	
	First lb.	including	Over
	or fraction	10 lbs.	10 lbs.
Local	10c	1.0c	0.75c
1st, within 50 miles	12 c	2.1c	2.0c
2nd, within 150 miles		2.1c	2.0c
3rd, within 300 miles	13c	3.0c	2.8c
4th. within 600 miles	14c	4.5c	4.25c
5th, within 1000 miles	15c	6.0c	5.50c
6th, within 1400 miles	16c	7.5c	7.25c
7th, within 1800 miles	17c	9.5c	9.25c
8th, Everything beyond	18c	11.5c	11.25c
CANADA all parts	14c f	or each po	und

If in doubt obtain your zone rate from your postmaster. NOTE: These rates are given as effective on January 1st, 1949 but in case of any changes, the new rate will be effective.

Grand Rapids Growers, Inc.

Seed Merchants

Cor. Wealthy and Ionia Ave., S.W. Grand Rapids, Mich. Phone: 97216

Asparagus

CULTURAL DIRECTIONS. One-half ounce of seed will sow 50 feet of drill and produce about 500 plants. Drill the seed in rows about 24 inches apart, covering seed 1 in. Cultivate well, keep free from weeds and they should be all right to transplant to permanent beds the following spring. An application of a good commercial fertilizer in the spring is recommended to avoid weed seed in barnyard manure and an application of phosphate and potash after the cutting period. Do not cut until third year, limit cutting to middle of June. Every fall before the seed is ripe, cut tops and burn them. Remember, the bed well planted will last for at least 20 years, treat it well.

★ Mary Washington Rust-Resistant Asparagus The largest and most tender green Asparagus. This is a decided improvement due to the untiring efforts of Prof. J. B. Norton, member of the Plant Breeding Staff of the U. S. Dept. of Agriculture. Suitable for quick freezing. Oz., 20c; ½ lb., 50c; 1 lb., \$1.50, postpaid.

Paradise New. Early maturity, heavy producer and fine quality. In looks it is very similar to Mary Washington. The stems are just as large and just as green, but here it ceases, as Paradise is much milder, and will produce a crop the second year from seed. Remarkable results have been obtained, and it is recommended for the home garden as well as market. Suitable for quick freezing. Oz., 40c; 1/1 lb., \$1.20; 1 lb., \$4.00, postpaid.

Asparagus Roots

We have the Palmetto and Mary Washington Rust-Resistant Asparagus roots, every spring, and as we handle only the very best 2-year roots, that are locally grown, we will ask that you write us for prices in whatever quantity you may want.



Pencil Pod Black Wax

Be sure to include postage on all quantities marked "Not Prepaid." See rates on page 3.



Beans

CULTURAL DIRECTIONS. One pound to 100 feet of drill; about three-fourths bushel per acre of Bush Beans. Beans thrive on a rich, warm, light soil. It is not safe to plant until about the middle of May, as the seed will rot in cold, wet ground, and plants will not stand frost. Plant dwarf beans in rows 2 feet apart and from 4 to 6 inches apart in the rows. Lima Beans should not be planted until June first, when the soil is thoroughly warmed through. Limas will rot in cold ground.

Wax Podded Varieties

★ Pencil Pod Black Wax 52 days. Pods are round, very long, tender and entirely stringless. Extremely productive. Best market gardeners sort. Suitable for quick freezing. 1 lb., 60c, postpaid. Not prepaid, 10 lbs., \$5.50; 25 lbs., \$13.25; 50 lbs., \$25.00.

★ Unrivaled Wax Beans 53 days. Small plant, very early and great yielder. Pods about 5½ and stringless. Color pale yellow. 1 lb., 45c, postpaid. Not prepaid, 10 lbs., \$4.00; 25 lbs., \$9.00; 50 lbs., \$17.50.

Golden Wax (Top Notch). 52 days. An excellent early home garden variety. Pods clear gold-freezing. 1 lb., 50c, postpaid. Not prepaid, 10 lbs., \$1.50; 25 lbs., \$10.50; 50 lbs., \$20.00.



Unrivaled Wax Beans

Green Podded Varieties

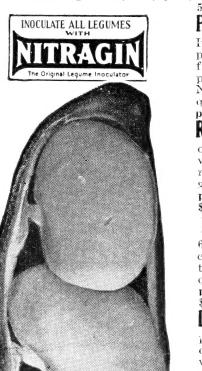
Landreth Stringless Green Pod 53 days. An improvement of Burpee's Stringless Green Pod. Vine is more erect, with darker foliage and a longer, slimmer pod. Pods 6 to 8 inches long, slightly curved, meaty, and absolutely stringless. Undoubtedly the best round-podded Bean on the market today. Very prolific and an ideal variety for home garden, market gardeners and canners. Suitable for quick freezing. 1 lb., 45c, postpaid. Not prepaid, 10 lbs., \$4.00; 25 lbs., \$9.00; 50 lbs., \$17.50.

★ Tendergreen 54 days. A new introduction, and now one of the most popular green Beans. Hardy; dependable cropper, medium large, dark green and stringless. Suitable for quick freezing. 1 lb., 60c, postpaid. Not prepaid, 10 lbs., \$5.50; 25 lbs., \$13.25; 50 lbs., \$25.00.

Giant Stringless Green Pod 53 days. Similar to Landreth Stringless but pods are a little longer, straighter and more slender, more depressed between Beans and slightly lighter in color; early, hardy and of highest quality. 1 lb., 40c, postpaid. Not prepaid, 10 lbs., \$3.50; 25 lbs., \$7.75; 50 lbs., \$15.00.

Bountiful 48 days. Best of the flat-podded varieties. Pods 6½-7 inches long, thick, flat and slightly curved. Stringless and of fine quality; color light green. Suitable for quick freezing. 1 lb., 50c, postpaid. Not prepaid, 10 lbs., \$4.50; 25 lbs., \$10.50; 50 lbs.. \$20.00.

Black Valentine 52 days. A round-podded, stringless shipping and market variety. Pods 6 to 6½ inches long, dark green, slightly curled. Suitable for quick freezing. 1 lb., 40c, postpaid. Not prepaid, 10 lbs., \$3.50; 25 lbs., \$7.75; 50 lbs., \$15.00.



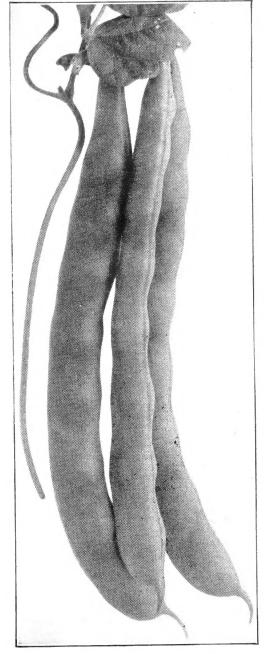
Plentiful 50 days. Very desirable for shipping or for the home and market garden. It is a green flat-podded bush Bean, an improved, very productive variety of the Bountiful type. Long straight, medium deep green pods, brittle, stringless, of a distinct flavor. ful type. Long straight, medium deep green pods, brittle, stringless, of a distinct flavor. Notably resistant to common rust. Suitable for quick freezing. 1 lb., 40c, postpaid. Not prepaid, 10 lbs., \$3.50; 25 lbs., \$7.75; 50 lbs., \$15.00.

Refugee or 1000 to 1 70 days. A very productive, hardy, vigorous late sort. Pods 5 to 5½ inches long, somewhat slender, round and slightly curved, almost stringless and of good quality; color light green. Suitable for quick freezing. 1 lb., 60c, postpaid. Not prepaid, 10 lbs., \$5.50; 25 lbs., \$13.25; 50 lbs., \$25.00.

Kentucky Wonder or Old Homestead

65 days. The most popular green-podded, climbing Bean; early and productive. Pods 8 to 9 inches long, very slender. Suitable for quick freezing. 1 lb., 40c, postpaid. Not prepaid, 10 lbs., \$3.50; 25 lbs., \$7.75; 50 lbs., paid,

Dutch Case Knife (Snijboonen). 65 days. Pole Bean. Green snap pods, 7 to 8 inches long, straight, flat, brittle, of good quality; best as a shell bean. Beans very flat, ivory-white. 1 lb., 60c, postpaid. Not prepaid, 10 lbs., \$5.50; 25 lbs., \$13.25; 50 lbs., \$25.00.



Landreth Stringless Green Pod

Scarlet Runner 64 days. An outstanding Bean for its ornamental purposes but may also glossy dark green. Has large, beautiful scarlet blossoms. Pods 6 to 6½ inches long, broad, oval, fleshy, stringy, fair quality in young stage. 1 lb., 40c, postpaid. Not prepaid, 10 lbs., 2250

Lima Beans Pole Varieties

King of the Garden Lima 88 days. An improved strain, vigorous, midseason, wide and uniformly four-seeded. 1 lb., 60c, postpaid. Not prepaid, 10 lbs., \$5.50; 25 lbs., \$13.25; 50 lbs., \$25.00.

Early Jersey Pole Lima (Sieberts). 80 days. An early midseason variety. Very productive and highest quality. Pods 5 to 6 inches long; beans rather thicker than the King of the Garden, but of the same type. 1 lb., 60c, postpaid. Not prepaid, 10 lbs., \$5.50; 25 lbs., \$13.25; 50 lbs., \$25.00

Dwarf or Bush Varieties

Burpee's Improved Bush Lima 75 days. Both Beans and pods are larger than the old type. The pods measure 5 to 6 inches long by 1¼ inches wide and are of a luscious flavor. They are frequently borne in clusters of from 5 to 8 pods. Suitable for quick freezing. 1 lb., 60c, postpaid. Not prepaid, 10 lbs., \$5.50; 25 lbs., \$13.25; 50 lbs., \$25.00.

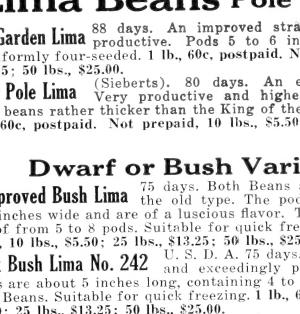
★ Fordhook Bush Lima No. 242

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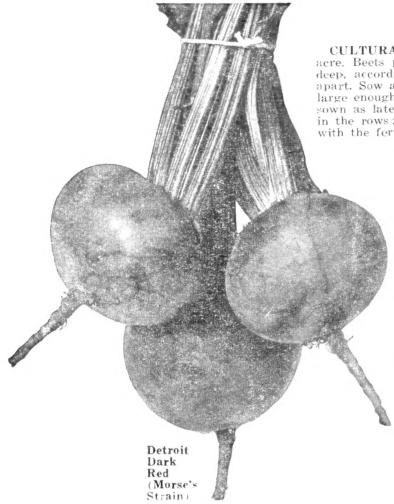
deners. Pods are about 5 inches long, containing 4 to 5 large, oval-shaped, very thick, white Beans. Suitable for quick freezing. 1 lb., 60c, postpaid. Not prepaid,

thick, white Beans. Suitable for quick freezing. I lo., ove, postpard. Not pecpara, 10 lbs., \$5.50; 25 lbs., \$13.25; 50 lbs., \$25.00.

**Henderson Bush Lima* A vigorous, hardy, very early and small type of Bush Lima. Pods small, about 3 inches long, containing 3 to 4 small, flat, white Beans. Suitable for quick freezing. 1 lb., 45c, postpaid. Not prepaid, 10 lbs., \$4.00; 25 lbs., \$9.00; 50 lbs., \$17.50.



Burpee's Improved Bush Lima



Beets

CULTURAL DIRECTIONS. One ounce to 50 feet of drill; 6 to 8 pounds per acre. Beets prefer a well-prepared friable soil planted from ½ inch to ¾ inch deep, according to the texture of soil. For an early crop sow in drills 1 foot apart. Sow as early as the ground can be worked in the spring. When plants are large enough to use as greens, thin to 3 inches apart in the row. Beets can be sown as late as July for main crop. Hen manure is recommended as a fertilizer in the rows; care being used that the seed does not come in immediate contact with the fertilizer.

Early Wonder

55 days. An early variety. It is turnipshaped and is always smooth. The flesh is shaped and is always smooth. The flesh is

*Early Wonder shaped and is always smooth. The flesh is a beautiful deep red color and is of excellent quality. Tops are small and erect. Exceptionally good for early bunching. Oz., 20c; 1/1 lb., 50c; 1 lb., \$1.50, postpaid.

★ Detroit Dark Red (Morse's Strain.) 55 days. The best for market gardens or home use. Roots smooth, medium size, globe-shaped; skin dark red; flesh solid vermilion-red. Tops small, upright, dark green, shaded red. Oz., 20c; ¼ lb., 50c; 1 lb., \$1.50, postpaid.

Crosby's Egyptian 58 days. Where an early market sort is desired, our strain is unequalled. Roots a flattened globe shape, skin very dark red, flesh a trifle lighter, tops small. Oz., 20c; ¼ lb., 50c; 1 lb., \$1.50, postpaid.

Early Blood Turnip, Improved 60 days. Old standard table Beet. Roots nearly round or slightly flattened, bright red, zoned and of good quality. Not so early as Detroit, but with a larger, coarser top. Oz., 20c; 1/4 lb., 50c; 1 lb., \$1.50, postpaid.

Green Top Bunching 60 days. Early, extremely attractive bunching beet. Tops medium sized and erect. Foliage clean, grayish green that does not turn red or brown in the fall. Roots round, smooth and glossy. flesh bright blood-red. Mostly grown for Beet greens. Oz.. 20c; ¼ lb., 50c; 1 lb., \$1.50, postpaid.

Mangel or Stock Beets

CULTURAL DIRECTIONS. One ounce to fifty feet of drill, five pounds per acre. Sow early in the spring, in rows about two feet apart; cover seed one and one-half inches deep, pressing ground firmly over the seed. When plants are three inches high thin to about eight inches apart in the row. The plants pulled may be used for greens.

Mammoth Long Red 120-150 days. A favorite with the well-formed; dark red color, very nutritious; a Dig cropper. Oz., 15c; 1/1 lb., 49c; 1 lb., \$1.25, postpaid.

Golden Tankard (Yellow Eckendorf). 120-150 days. Very productive and sweet; tops and neck very small; flesh yellow; especially relished by cows and sheep. Oz., 15c; 1/4 lb., 40c; 1 lb., \$1.25, postpaid.

Broccoli

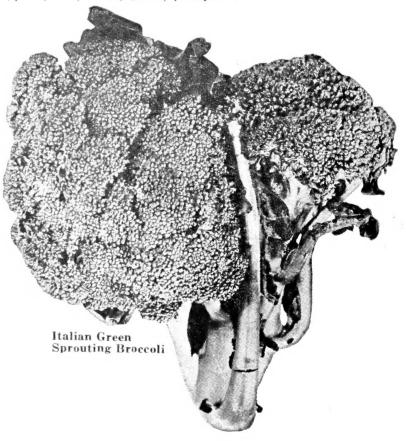
A frequent application of nitrate of soda can be of great value to promote the life of this crop.

Italian Green Sprouting 75 days. This variety produces a large head, like Cauliflower, consisting of a compact cluster of bluish green flowers. When the central head is removed, the plant produces many branches, each bearing small heads. These are cut with 3 or 4 inches of the branch attached and tied in bunches for market. The stems as well as the flower heads are cooked and served as Cauliflower. Suitable for quick freezing. Oz., 25c; 1/1 lb., 75c; 1 lb., \$2.50, postpaid.

Sugar Beets

Sugar Beets and Mangels are of great value for stock feeding, because of the improved health and condition of the animals, increased flow and quality of milk, and because of the saving in fodder. The yield is enormous, and the cost of growing is trifling. Grow a patch of them for winter feed. They are also excellent for poultry.

Giant Feeding Sugar 120-150 days. A most valuable. It is a sugar, oval-shaped, skin rose colored, flesh white, very nutritious and easily harvested. Oz., 20c: 1/4 lb., 50c; 1 lb., \$1.50, postpaid.



Cabbage

CULTURAL DIRECTIONS. One ounce will produce about 2000 plants; 10,890 plants will plant an acre of early Cabbage; and 7,260 plants for an acre of late. Three ounces of seed will plant an acre of early and five ounces an acre of late Cabbage. For early Cabbage, sow seed in hotbeds in January or February. Transplant as early as possible to the open ground about two feet apart each way. For late Cabbage, sow in one ground in May and transplant about July first in

sow in open ground in May and transplant about July first in rows $2\frac{1}{2}$ feet each way.

In fertilizing, we recommend hen manure at the rate of one handful to three feet in the furrow. Care must be used so that the roots do not come in direct contact with the manure.

Early Varieties

★ Golden Acre ⁶⁴ days. Heads round, very hard. Matures two to three weeks earlier than Copenhagen Market, but is otherwise quite similar. Owing to earliness and remarkable uniformity, will prove the most profitable early Cabbage for market gardeners. Oz., 30c; 1/4 lb., 90c; 1 lb., \$3.00, postpaid.

Early Jersey Wakefield 62 days. Market gardeners in general consider this the best early variety. Conical heads are uniform in shape, very solid. Our stock is dwarf, compact and extremely early. Oz., 30c; ¼ lb., 95c; 1 lb., \$3.00, postpaid.

Improved Copenhagen Market 65 days. Nearly as field. Stems short, heads large, round and solid, few outer leaves. Oz., 30c; 1/4 lb., 95c; 1 lb., \$3.00, postpaid.

Green Acre 66 days. A comparatively new strain with the general characteristics of Golden Acre, but holds its green color longer, an added value to market gardeners and shippers. Oz., 30c; ½ lb., \$2.50 postpaid \$1.00; 1 lb., \$3.50, postpaid.



Golden Acre Cabbage

Ferry's Round Dutch 71 days. Splendid for home and market garden. Plants small and compact; stem short. Heads almost ball-shaped; commonly 7 to 8 inches in diameter, 6 inches deep, and weigh 4½ to 5 lbs.; firm and of fair quality. Oz., 30c; ½ lb., \$1.00; 1 lb., \$3.50, postpaid.

Late Varieties

Ferry's Hollander 100 days. Decidedly the best vacome firm while still rather small. They reach good marketable size in 90 to 100 days, but continue to enlarge, maturing in about 120 days. Plants medium small, allowing closer planting, short stem, erect and compact. Extremely hardy, splendid quality and keeps perfectly in storage until late spring. Oz., 35c; 1/4 lb., \$1.25; 1 lb., \$4.00, postpaid.

★ Penn State Ballhead 100 days. A heavy yielding strain of the short stem Danish Ballhead type. Originated by Pennsylvania State College. Yields as high as 26 tons per acre have been recorded. Oz., 30c; 1/1 lb., \$1.00; 1 lb., \$3.50, postpaid. ★ Danish Ballhead 95 days. Short-stemmed, heads round, very solid and heavy. Splendid keepers, hardy, and the best winter sort. Oz., 30c; ¼ lb., \$1.00; 1 lb., \$3.50, postpaid.

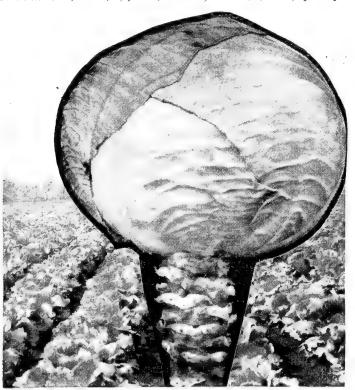
Premium Flat Dutch 105 days. Highly valued for its fine quality. Heads very solid, broad, round, flattened on top, fine grained and tender. Oz., 30c; ¼ lb., 95c; 1 lb., \$3.00, postpaid.

American Savoy (Chieftain). 85 days. Large, flatvish heads, very curly and hard. One of the best Savoys. Oz., 30c; ¼ lb., \$1.00; 1 lb., \$3.50, postpaid.

postpaid.

Mammoth Rock Red 90 days. Heads solid, of good quality. Oz., 40c; 1/4 lb., \$1.25; 1 lb., \$4.50, postpaid.

Red Stonehead 80 days. An exceptionally good variety, forming uniform round heads; smooth, hard, of a glowing red color. A good keeper. Oz., 40c; 1/4 lb., \$1.25; 1 lb., \$4.59, postpaid.



Danish Ballhead

Yellows-Disease Resistant Varieties

★ Yellows Resistant Golden Acre 62 days. This strain be grown successfully on soil infested with yellows. Can be cut just as early as the standard variety, and has a similar yield. But under abnormal conditions and backward weather, it has a tendency to bolt readily and the regular strain is recommended. Oz., 40c; ½ lb., \$1.25; 1 lb., \$4.50, postpaid.

★ Wisconsin Hollander No. 8 (Yellows-resistant). 90-days. A heavy yielding late storage type, highly resistant to yellows. Round head, and yields greater tonnage than ordinary strains. Oz., 40c; 1/4 lb., \$1.25; 1 lb., \$4.50, postpaid.

**Marion Market* of Copenhagen Market. Round head

and crisp tenderness of the parent cabbage. Principally adapted on yellows infested soils where nonresistant strains fail completely. Oz., 30c; ¼ lb., 95c; 1 lb., \$3.00, postpaid.

Celery Cabbage

CULTURAL DIRECTIONS. One ounce will produce 2000 plants. Do not sow seed till the last of May, earlier sowing generally going to seed instead of making heads. Seed may be sown in seed beds and transplanted in rows three feet apart and about fifteen inches apart in the row, or may be sown in rows and thinned.

Michihli 70 days. A new strain of Celery Cabbage. In habit of plant it resembles Chihili, but the growth is more vigorous. The leaves are dark green and do not have the yellowish cast of Chihili. The leaf margins are waved and the individual plants are very uniform. It is surer heading, and in trial plantings made on a commercial scale it has produced 99% marketable heads. Oz., 65c; 1/4 lb., \$1.75; 1 lb., \$6.50, postpaid.

Chihili 70 days. Imported from Holland. This is the true strain. It has a delicate flavor, much milder than Cabbage. The heads are long, about 16 inches, rather slim, coming to a point at the top. Color is very dark bluish green, with the inner leaves and stalks blanched to a beautiful snow-white. This past season it proved its place and is highly recommended as a true strain. Oz., 25c; 1/4 lb., 75c; 1 lb., \$2.50, postpaid.



Swiss Chard

CULTURAL DIRECTIONS. One ounce to fifty feet of drill; five pounds per acre. Sow early in the spring, in rows eighteen inches apart and thin to one foot apart. The plants are of very rank growth, and will continue to grow and produce all summer, and if given a little protection during the winter, will produce early greens in the spring.

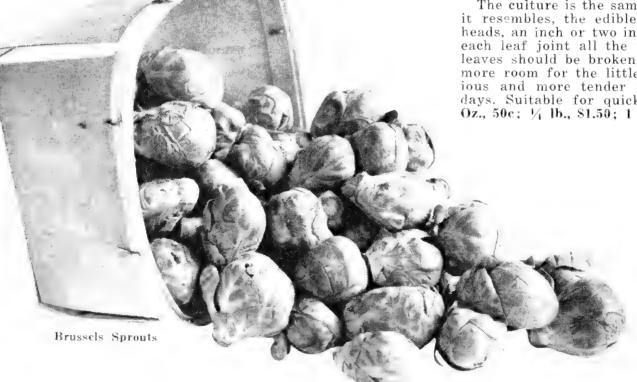
Luculus 55 days. Leaves large and curly. Plant grows about 2 feet high, midribs are very broad and are a good substitute for Asparagus during the summer months. Oz., 10c; 1/1 lb., 30c; 1 lb., \$1.00, postpaid.

New Rhubarb A Chard of unique crimson_color. Stalks sweet and succulent. Bright red in color; leaves green to bronze, heavily veined with red. Plants are vigorous and will yield a tremendous crop throughout the summer and fall, until frost. Pkt., 10c; oz., 30c; ¼ lb., 95c; 1 lb., \$3.00, postpaid.





The culture is the same as for Cabbage which it resembles, the edible part being the small heads, an inch or two in diameter that form at each leaf joint all the way up the stalk. The leaves should be broken off in the fall to give more room for the little heads to grow. Delicious and more tender than any Cabbage. 90 days. Suitable for quick freezing. Half-dwarf. Oz., 50c; 1/4 lb., \$1.50; 1 lb., \$5.00, postpaid.



You have bought them on the market in the little quart boxes as shown. Why not grow your own? It will be an effort worth while for you to have them in your own garden.

So.

<u>a</u>

MICHIGAN GOLDEN



YELLOWS-RESISTANT SELF-BLANCHING CELERY

An improved strain of the original Michigan Golden variety bred by plant pathologists of Michigan State College for resistance to Fusarium yellows and introduced by Grand Rapids Growers' Inc.

GENUINE MICHIGAN GOLDEN SEED IS SOLD ONLY IN PACKETS BEARING THE SEAL OF MICHIGAN STATE COLLEGE

Michigan Golden is highly resistant to Fusarium yellows, also known as not rot, crown rot, stunt or sickness. It is not resistant to other celery disases and seed treatment together with the use of protective dusts or sprays that be relied upon to control leaf blights. In any inquiry concerning this seed inclose this label and address your computations of the second seco

munication to

MICHIGAN STATE COLLEGE DEPARTMENT OF BOTANY AND PLANT PATHOLOGY EAST LANSING, MICHIGAN

No warranty, expressed or implied, is given as to description, productiveness or purity of this seed and we can not be in any way responsible for the crop. If the purchaser does not accept these terms the seed should be returned immediately and money will be refunded.

Original Michigan State College seed is sold only in packets bearing this label and the seal of the College. No other seed is genuine. Beware of bulk seed of this variety.

Cauliflower

CULTURAL DIRECTIONS. One ounce of seed will produce 4000 plants. Five ounces of seed to an acre. Directions about the same as Cabbage, except planting in rows about 3 feet apart and 18 inches apart in the row. When plants begin to head, tie leaves up around the heads to protect from

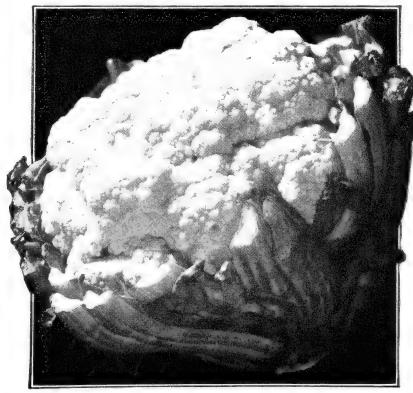
Early Select Snowball 52 days. A very fine strain producing a magnificent head of snowy whiteness. Head is very compact, even and fine grained. The outer leaves are erect, tending to protect the young head from the hot sun. Selected for evenness in heading, enabling you to market the entire field in rapid succession. Suitable for quick freezing. Oz., \$1.50; ¼ lb., \$5.50; 1 lb., \$20.00, postpaid.

★ Growers Special Improved 60 days. Medium sized heads, snowy white in color, evenly grained and compact. The very best variety of the Snowball type. Suitable for quick freezing. Oz., \$2.00; ½ lb., \$7.00; 1 lb., \$25.00, postpaid.

With wartime restrictions removed, we can again offer you imported Cauliflower seed.

Original. Snow-white solid heads with uni-Helios form, tall, upstanding protecting foliage. Is unsurpassed for cutting during the last period of summer. Oz., \$3.50; ¼ lb., \$11.50; lb., \$40.00, postpaid.

Early type, though a little later than Stella Selandia Nova, the Early Snowball. Has large, broad, robust foliage which affords good protection for the large, solid white heads. Suitable for quick freezing. Oz., \$3.50; 14 lb., \$11.50; 1 lb., \$40.00, postpaid.



Early Select Snowball

MICHIGAN Celery

Michigan State College Fusarium Yellows-Resistant Michigan Golden Celery was introduced by us in 1933 and its record since then has proven it to be the most resistant and the most productive yellow celery for growing on soils infested with the destructive root rot fungus. It is an especially valuable variety for midsummer and late crops that are subjected to the high soil temperatures of the summer months. Under those conditions Fusarium Yellows is most destructive in susceptible varieties of celery. Michigan Golden retains its high resistance under summer temperature conditions most favorable for root rot and will produce a crop when less resistant varieties

Due to the nature of the Fusarium Yellows disease, continuous breeding is required to maintain the high resistance of this variety. As a result of continuing reselection work, Michigan Golden is now greatly improved over the original introduction. Larger and more uniform stalks with a heavier base are characteristic of this new strain.

We strongly recommend Michigan Golden for planting in soils where Fusarium Yellows or root rot attacks other varieties of yellow celery. We especially recommend it for the summer and late crops. No one variety is adapted for use on all soils and for all climatic conditions. Michigan Golden is especially adapted for Michigan conditions but is widely and successfully grown in other sections of the country where root rot is also a destructive disease.

Michigan Golden was developed by plant pathologists of Michigan State College and the breeding work is continuing under their supervision. All genuine Michigan Golden seed is grown under their control, packeted at the college and sold only in the original sealed containers.

Prices: $\frac{1}{2}$ oz., \$1.25; 1 oz., \$1.75; 2 ozs., \$3.50; $\frac{1}{4}$ lb., \$5.50; 1 lb., \$22.00, postpaid.



One Dozen Stalks is an Armful of Michigan Golden



New Golden Self Bianching

CELERY—Choice

CULTURAL DIRECTIONS. One ounce will produce from 5,000 to 10,000 plants; two ounces per acre. Muck soil is best for Celery, but good Celery may be grown on rich, loamy soil if water can be applied freely. Celery needs manure and fertilizer, but as muck soils are usually well supplied with an abundance of nitrogenous matter, a fertilizer high in phosphate and potash usually gives the best results.

YELLOW VARIETIES

New Golden Self Blanching

85 days. This is the celebrated "Vilmorin"
French strain and has been imported direct
from France. It has a long stalk and is commonly called "TALL STRAIN."
Oz., \$1.00; ½ lb., \$3.50; 1 lb., \$12.00, postpaid.

New Golden Self Blanching

85 days. American grown. Oz., \$1.00; ½ lb.,
\$3.50; 1 lb., \$12.00, postpaid.

Golden Plume No. 4162 (New strain.) Our improved strain fills the need
for a taller, long-stemmed Golden Plume. Retains
earliness and ease of blanching of the original strain. but is more compact

earliness and ease of blanching of the original strain, but is more compact in form, straighter, and much better adapted to the standard crate. Normally 24 to 26 inches tall, with stems $7\frac{1}{2}$ to $8\frac{1}{2}$ inches and a full heart. Oz., \$1.25; $\frac{1}{4}$ lb., \$4.50; 1 lb.,

\$16.00, postpaid.

Growers Wonderful 80 days. A valuable early variety similar to the Golden Plume. The plants are semi-dwarf, very vigorous and have a very full heart which bleaches quickly to a golden yellow color. Excellent for market gardeners. Oz., \$1.00; 1/4 lb., \$3.50; 1 lb., \$12.00.

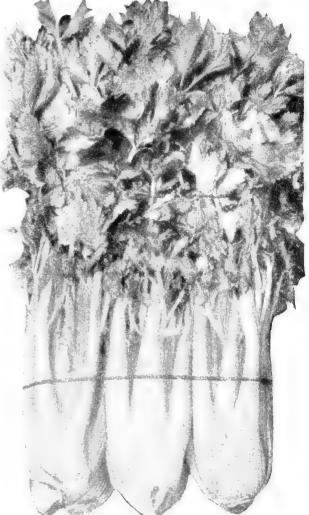
Taller Jersey Golden Plume It is an excellent variety for early planting, showing some resistance to soil diseases. On account of the great care taken in selecting and rogueing we know there is none better. The ribs are from 7 to 8 inches to the first joint, according to growing conditions and the height is about 26 to 28 inches. Oz., \$1.75; ½ lb., \$6.50; 1 lb., \$24.00.

Tall Non-Bolting Golden Plume

This is a strain that grows taller and faster than the original types. Its ability to withstand low temperatures without bolting make it the most satisfactory of the Golden Plume strains for growing under certain unfavorable conditions. 8½ to 9 inches to joint; 26 to 27 inches overall

height. Oz., \$1.59; 1/4 lb., \$5.50; 1 lb., \$20.00, postpaid.

Cornell No. 19 100 days. We offer the true strain of this excellent variety. It has been developed by Cornell University by crossing Golden Self Blanching and Pascal. 10½-11 inches to joint with an over-all length of 24 to 25 inches. Hearts long and comparatively full. Stems thick, rounded and of smooth texture. Combines the good qualities of the Pascal type and is highly resistant to fusarium yellows. Oz., \$1.50; 1/4 lb., \$5.50; 1 lb., \$18.00, postpaid.



Jersey Golden Plume Celery

Kilgore's Pride 105 days. A very early marketing variety. Broad, thick-ribbed, 8 to 10 inches to the first joint, averaging 25 inches over all. Heavy heart and a very heavy yielder. Oz., \$1.75; 1/4 lb., \$6.00; 1 lb., \$22.00, postpaid.

SUPPLIES FOR CELERY GROWERS

Krop-Saver C-1 Dust. This fungicide is a new material containing an insoluble copper with light weight tale as a carrier. No water or moisture required to make it active. Can be dusted on Celery when the leaves are dry. Lends plant stimulation through copper being absorbed through the dry. Lenus leaf surface. Many Celery growers are using this new dust and getting improved Celery yields.

Celery Bleaching Paper. "Farmrite" is really what the Celery grower wants. It is constructed of two sheets of heavy, first quality kraft paper combined with a waterproof, light-excluding cement of asphaltum and is heavily re-inforced with strong cords to resist tearing. Comes in 10-inch wide rolls by 310 feet long and 12-inch wide rolls by 310 feet long.

Celery Tape, 17 and 21 strand. Celery Braids, 13, 17, 21, and 25 strand. Hard twist, 4-ply and 6-ply. Sea Island, 2-ply hard twist. Soft twist, 8-ply.

The above are all red in color.

Prices quoted upon application, and we would appreciate an opportunity to quote you on your requirements.

DISEASE RESISTANT VARIETIES

MICHIGAN GOLDEN. Listed, described and illustrated in full on page 9.

CORNELL 19. Listed on this page.

GROWERS GOLDEN No. 31 C. This variety is new and shows considerable resistance to soil disease. Height 22 to 26 inches; stems 8 to 10 inches to first joint. Oz., \$1.50; ½ lb., \$5.50; 1 lb., \$20.00, postpaid.

ERSEY GOLDEN PLUME. Taller type. Listed on this page. Shows some resistance under average conditions.

Market Garden Varieties GREEN VARIETIES

The finest, earliest green Celery we know. Vigorous and large for an early sort. The outer leaves are green and the very full heart is pure white, brittle and of most delicious flavor. In our trials this proved to be an outstanding variety in all details. It is the best green Celery on the market today, and should be in heavy demand this year. Oz., \$2.00; ¼ lb., \$7.00; 1 lb., \$25.00, postpaid.

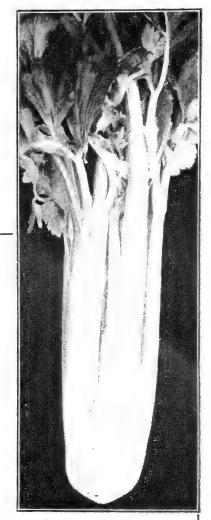
Paragon A Celery of exceptional merit. The plant is dwarf, vigorous, quite hardy, and has a very full heart. Stalks broad, quite thick, very solid, crisp and tender, bleaching readily to a golden yellow color. Highly recommended for an early or late crop. Oz., \$2.25; ¼ lb., \$7.50; 1 lb., \$26.00, postpaid.

Pascal and Utah Strains

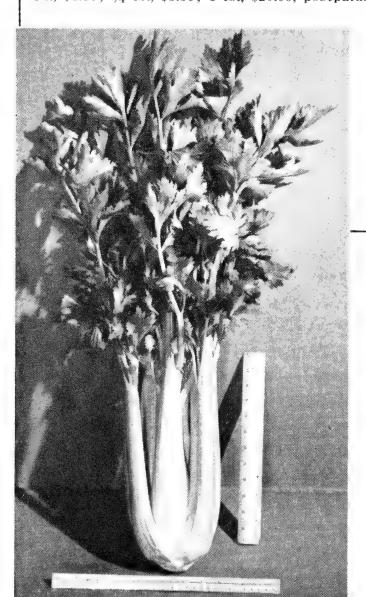
Growers Pascal No. 49 An entirely new strain of this increasingly popular type of Celery. Grown and developed by one of the most expert seed producers in the country. May be grown for early crop, if it is transplanted in the field after all danger of frost has passed. It is 22 to 26 inches tall, 8- to 10-inch joint, stalky, compact and straight in habit of growth. Stems broad-ribbed but smooth, indicating its fine, brittle texture and excellent nutty flavor. May be bleached to light greenish yellow or shipped from row as any other green Pascal. Oz., \$2.00; ½ lb., \$7.00; 1 lb., \$25.00, postpaid.

Improved California Pascal (New Strain). 120 days. This is a green type summer Pascal Celery which bleaches readily. The heart stalks grow tall and full. The entire stalk is of excellent eating quality, being tender with a delicious nutty flavor. The thick rounded stalks are smooth, not ribbed and free from strings. Height 24 inches with 10 to 12 inches to the first joint. May be used for either early, medium or late crop. Oz., \$2.25; ½ lb., \$7.50; 1 lb., \$26.00, postpaid.

California Pascal A green midseason Celery. Easy to blanch. Height 26 to 28 inches, stems 9 to 10 inches long. Very heavy, rounded with narrow channel, slightly tapered. Stems numerous, forming a compact head. This is the strain that is proving successful in many of the larger markets. Oz., \$1.50; ½ lb., \$5.50; 1 lb., \$20.00, postpaid.



Earligreen



Growers Pascal No. 49

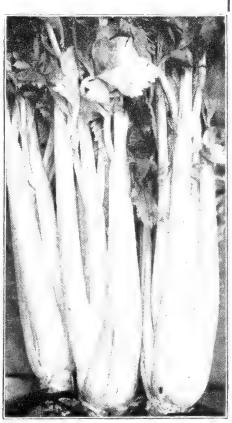
Utah No. 15 A strain of Utah of midseason maturity. Plants are large, height 26 to 28 inches. Leaves are dark green, deeply cut, moderately broad. Plants are erect, compact, full hearted. The edible stem is usually 8 to 10 inches, of medium width, thick, rounded, quite smooth, crisp and of fine quality. Oz., \$1.50: 1/4 lb., \$5.50; 1 lb., \$20.00, postpaid.

Superior Pascal A new strain of the Pascal family. We suggest a trial of this new variety to growers of Pascal Celery. Oz., \$1.50; 1/4 lb., \$5.50; 1 lb., \$20.00, postpaid.

New Growers Green

A superior strain of a green Celery, having the characteristics of the Newark Market but greatly improved with greater vigor and quicker bleaching ability. The stalks are large, thick and fleshy, very brittle, crisp and of fine flavor. Many growers who are having trouble with their yellow Celery should try this strain. Oz., \$2.50; ½ lb., \$8.00; 1 lb, \$28.00, postpaid.

Celeriac Large Smooth Prague. 110 days. Turnip rooted Celery. Oz., 25c; 1/4 lb., 75c; lb., \$2.00, postpaid.



Paragon

Carrots

CULTURAL DIRECTIONS. Carrots require about the same simple care as Beets; they have no serious insect enemies, and they are rarely attacked by disease. It is best to plant them in soil that is friable and richly fertilized. Plant the seed one-half inch deep in loose, well-prepared soil, making rows 16 to 24 inches apart. Cultivate as soon as the plants are well established and thin to 2 or 4 inches in row, according to size of the variety. Plantings may be made from early spring until mid-June. For winter storage the later date is advisable.

★ Nantes Coreless, Strong Top 68 days. A very superior Carrot. It is coreless, brittle, fine grained and of fine, mild, sweet flavor. The color is reddish orange and the skin is smooth. It is 6 inches long, cylindrical, and very stump-rooted. Suitable for quick freezing. Oz., 30c; ¼ lb., 95c; 1 lb., \$3.00, postpaid.

Supreme Half Long 75 days. Resembles a small refined Danvers with short tops. Roots 6 to 7 inches long, about 2 inches in diameter at shoulder, tapering to a half stump. Exterior smooth and of excellent color. Interior flesh tender, sweet and of fine flavor. Core small and the same dark red as the rest of the flesh. Oz., 20c; 1/4 lb., 75c; 1 lb., \$2.50, postpaid.

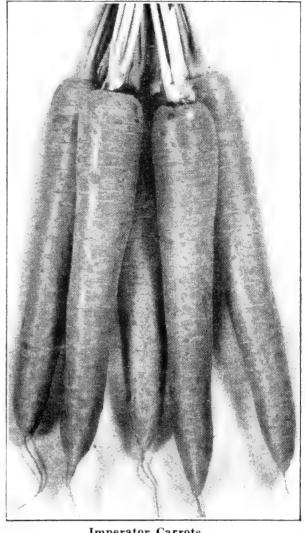
Imperator 77 days. Smooth and attractive in appearance, 7 to 8 inches long, with rounded shoulder and medium tapered roots. And the deep orange color of the exterior extends throughout the core and inside flesh, making it a Carrot of exceptionally fine flavor and quality. Used extensively for bunching. Oz., 20c; 1/4 lb., 75c; 1 lb., \$2.50, postpaid.

* Streamliner 77 days. An ideal new bunching Carrot for shippers and market gardeners. Tops short, rather sparse, dark green and strong. Roots long, slender, nearly cylindrical, 8 to 10 inches long, and they grow completely underground. Oz., 20c; 1/1 lb., 75c; 1 lb., \$2.50, postpaid.

★ Chantenay, Red-Cored 70 days. This is a distinct improvement over the well known standard Chantenay, especially in color, texture and quality of flesh. Roots 5½ to 6 inches long, 2¼ inches thick at the shoulder; tapered stump root. Flesh and core reddish orange, fine grained and tender. A favorite with canners, market gardeners and shippers. Suitable for quick freezing. Oz., 20c; 1/1 lb., 60c; 1 lb., \$2.00, postpaid.



Nantes Coreless Carrots



Imperator Carrots

Chantenay, Long Type 70 days. A strain of Chantenay bred especially for growing on soils where the moisture table is high. Tops are shorter than the regular Chantenay. Roots definitely longer but fully as large; stump rooted at maturity. Texture and color equal to Red-Cored Chantenay. Suitable for bunching or bushel use. Suitable for quick freezing. Oz., 20c; ¼ lb., 60c; 1 lb., \$2.00, postpaid.

Touchon o8 days. A quality Carrot for home and market garden. Tops medium height and strong. Roots orange-scarlet, 6½-7½ inches long; 1½-1½ inches thick; straight, cylindrical, strictly stump-rooted. Flesh deep orange with inconspicuous core. Similar to Nantes but preferred by some for greater length and stronger top. Suitable for quick freezing Oz., 30c; ¼ lb., 95c; 1 lb., \$3.00, postpaid.

★ Morse's Bunching 77 days. Tops short; foliage rather coarsely cut and stems medium size and strong. Roots at maturity are 11/4 to 11/2 by 8 inches in size, almost cylindrical with rounded shoulders, and are well stumped. Oz., 20c; 1/4 lb., 75c; 1 lb., \$2.50, postpaid.

Long Orange

Scarlet Horn

The roots will average about 3 inches long. Oz., 20c; ½ lb., \$2.00, postpaid.

Oxheart or Guerande

To days. Very short, thick and stubby. Very desirable for heavy clay soil. as it is easily harvested. Oz., 20c; ½ lb., \$2.00, postpaid.

Oxheart. Oxheart. Oz., 20c; ½ lb., \$2.00, postpaid. 85 days. Good variety for deep sandy soil.

White Belgian 95 days. Large, white stock carrot. Oz., 20c; ¼ lb., 60c; 1 lb., \$2.00, postpaid.

Yellow Belgian 95 days. Grows one-third out of the ground. Very large, long yellow stock Carrot. Oz., 20c; ¼ lb., 60c; 1 lb., \$2.00, postpaid.

SPECIAL GROWERS RECOMMENDATIONS Our cultural directions are the special recommendation of our growers who through actual experience know what is necessary for the successful growing of a crop, and give it to you for your guidance.

Sweet Corn

CULTURAL DIRECTIONS. One pint for 100 hills; about six quarts per acre. Early corn is planted in rows 2½ to 3 feet apart, and about 8 inches apart in the row, in May, and will be ready for table eight or nine weeks from date of planting. Later varieties should be planted from the 15th of May to the 15th of June. Plant in hills 3 to 4 feet apart. It will be ready for use in from 10 to 12 weeks from date of planting.

Open - Pollinated

Golden Early Market 72 days. Earliest of the golden varieties and better than the same size as Improved Bantam, with stalks 3½ feet tall, medium tender, sweet and of good flavor. A popular and prolific variety for home and market garden. Lb., 35c, postpaid. Not prepaid, 10 lbs., \$3.00; 25 lbs., \$6.50; 50 lbs., \$12.50.

Alpha 72 days. The earliest Sweet Corn. A money maker for the early market. Ears attractive; 8-rowed; very uniform. Kernels white, plump, sweet and tender. Lb., 35c, postpaid. Not prepaid, 10 lbs., \$3.00; 25 lbs., \$6.50; 50 lbs., \$12.50.

★Golden "Sunshine" 74 days. A valuable yellow variety for the market grower or the private gardener. It is a cross between the Golden Bantam and Gill's Early Market, and combines the earliness and large size of ear of the Gill's Early Market with much of the high quality of the Golden Bantam. It is ready for market a week to 10 days earlier than Golden Bantam, and has a much larger ear, the ears averaging 8½ inches long, with 12 to 14 rows. Lb., 35c, postpaid. Not prepaid, 10 lbs., \$3.00; 25 lbs., \$6.50; 50 lbs., \$12.50.

★ Golden Bantam 79 days. Hardy, early maturing, very dwarf. Cob is small but fills out nicely with large, deep cream-colored kernels, which turn yellow when ripe. No home gardens should be without this excellent corn. Lb., 35c, postpaid. Not prepaid, 10 lbs., \$3.00; 25 lbs., \$6.50; 50 lbs., \$12.50.

Improved Golden Bantam

85 days. Superior to the original Golden Bantam in quality, and has larger ear. It matures about the same time. Nearly all ears carry 12 rows of deep, rich, golden yellow kernels, set close upon the cob. It is a favorite with the market gardener. It 35c posts.

is a favorite with the market gardener. Lb., 35c, postpaid. Not prepaid, 10 lbs., \$3.00; 25 lbs., \$6.50; 50 lbs., \$12.50.

Golden Evergreen 95 days. This new variety combines and stowell's Evergreen. Has the bright golden color and tender kernels of Golden Bantam and the flavor and sweetness of Stowell's Evergreen. Ears much larger than Bantam; not quite as large as Evergreen, but much earlier. Stalks are full leaved and usually bear two well-developed ears. Lb., 35c, postpaid. Not prepaid, 10 lbs., \$3.00; 25 lbs., \$6.50; 50 lbs., \$12.50.

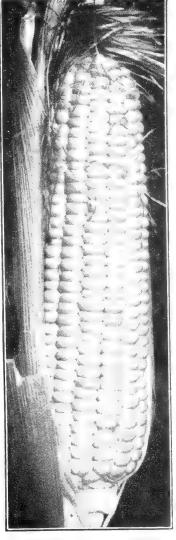
Early Evergreen 90 days. Has all the merits of the "Stowell's" Evergreen. This is a white Corn. It is a splendid variety for the market gardener. Lb., 35c, postpaid. Not prepaid, 10 lbs., \$3.00; 25 lbs., \$6.50; 50 lbs., \$12.50.

★ Stowell's Evergreen 90 days. The most popular late Sweet Corn. More extensively planted than any other sort, being the general favorite with market gardeners. Ears are of good size, grain deep; tender and sugary. Lb., 35c, postpaid. Not prepaid, 10 lbs., \$3.00; 25 lbs., \$6.50; 50 lbs., \$12.50.

Country Gentleman (White or Shoe Peg Corn). 90 days. An especially fine quality corn; without row formation. Lb., 35c, postpaid. Not prepaid, 10 lbs., \$3.00; 25 lbs., \$6.50; 50 lbs., \$12.50.

Golden Country Gentleman 90 days. The result of man and Golden Bantam, is without a row formation and similar to Country Gentleman. Kernels deep and narrow. Lb., 35c, postpaid. Not prepaid, 10 lbs., \$3.00; 25 lbs., \$6.50; 50 lbs., \$12.50.

Black Mexican 83 days. Reputed to be the sweetest and most delicious of all table Corn. Color is white when young, changing to bluish black in later stages. 1 lb., 35c, postpaid.



* Sunshine

Hybrids

A hybrid is the first generation of a cross between strains of different parentage and involving one or more inbred lines of corn or their combinations.

Gold Rush
67 days. This is the one. A first early yellow hybrid for the early market with the

Gold Rush 67 days. This is the one. A first early yellow hybrid for the early market with the strong hybrid vigor and productiveness. Stalks 6 ft. tall. Ears 8½ inches, 12 to 14 rowed, slightly tapered, well filled to the tip. Most attractive yellow; tight husk. Tender, sweet and of fine quality and flavor. Lb., 50c, postpaid. Not prepaid, 10 lbs., \$4.50; 25 lbs., \$10.50; 50 lbs., \$20.00.

Marcross C13x6 67 days. This has proved a very good early market and home garden variety. Stalks are short but sturdy, highly resistant to Stewart's disease. Ears long, plump, abruptly tapered at the tips, 10- to 14-rowed with light creamyellow, medium broad kernels of good quality. Lb., 50c, postpaid. Not prepaid, 10 lbs., \$4.50; 25 lbs., \$10.50; 50 lbs., \$20.00.

Golden Cross Bantam 85 days. Excellent for market gardens and well adapted for canners' use. Highly resistant to Stewart's disease and very prolific. Stalks sturdy, with exceptionally broad, dark green leaves. Ears 10- to 14-rowed, slightly lighter yellow than Golden Bantam. Kernels medium in width and depth. Suitable for quick freezing. Lb., 50c, postpaid. Not prepaid, 10 lbs., \$4.50; 25 lbs., \$10.50; 50 lbs., \$20.00.

loana Hybrid (All-America Selection.) 87 days. A midseason yellow hybrid, highly resistant to both drought and wilt. Plants tall and sturdy with broad, numerous leaves. Ears 7½ to 8 inches long, 12 to 14 rows, cylindrical, well filled with medium narrow light yellow kernels. An attractive and productive variety for either gardener or canner. Suitable for quick freezing. Lb., 50c, postpaid. Not prepaid, 10 lbs., \$4.50; 25 lbs., \$10.50; 50 lbs., \$20.00.

POP CORN

Australian Hulless Dwarf growing; heavy yielder of attractive ears; peculiar form, being nearly as thick as long. Color pearly white. Entirely hulless, making it the tenderest of any Pop Corn when popped. 1 lb., 40c, postpaid. Not prepaid, 5 lbs., \$1.75.

South American Yellow 110 days. Sunburst. Better adapted for Michigan climate. It matures about 2 weeks earlier than the true type South American yellow. Amber color, large size when popped, having a butter-colored tint. 1 lb., 40c, postpaid. Not prepaid, 5 lbs., \$1.75.

Table and Pickling Cucumbers

CULTURAL DIRECTIONS. One ounce of seed to 50 hills; 2 pounds per acre. Cucumbers should not be planted until the ground is warm, about June 1st. For pickles, they may be planted as late as July 1st. They require a warm, rich, sandy soil. Plant in hills about 4 feet apart and about 8 seeds to the hill. When all danger from insects is past, thin to 3 or 4 of the strongest plants.

Cucumber Beetle—No. 10 Pyrocide Dust is the control measure to keep your Cucumbers clean. Apply promptly and grow your Cucumbers without any trouble. Circular free on request.

Growers Early Dark Green

70 days. Selected from Cubit variety. A comparatively new variety of special merit, because of its excellent shape and dark green color. Fruits white spined, cylindrical and hold their color to a larger size than most other varieties. Fruits 7½ to 8 inches long, 1% inches in diameter. Shy seeder. Oz., 20c; 1/4 lb., 60c; 1 lb., \$2.00, postpaid.



Improved A & C

Marketer

Ace Hi 65 days. White spine variety, 9 to 11 inches long, round at ends; dark green with trace of light green around blossom scar, small seed cavity, crisp flesh. Oz., 20c; 1/4 lb., 60c; 1 lb., \$2.00, postpaid.

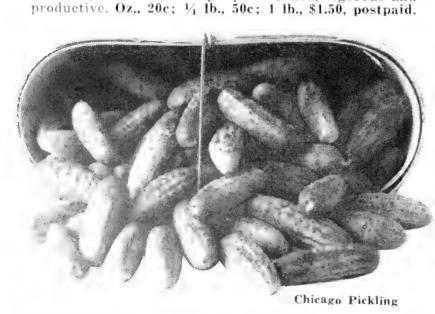
Stays Green

60 days. Splendid for shipping. A rich dark green, 8 to 9 inches long, slightly tapered, full at both ends. Oz., 20c; 1, 1b., 50c; 1 lb., \$1.50, postpaid.

(Black Diamond).

Improved Long Green A days. ard late, well known table sort. 12 to 14 inches long, slender, more or less warted, tapering towards the stem end, color dark green, flesh white and firm. Oz., 20e; 1/1 lb., 60e; 1 lb., \$2.00, postpaid.

White Spine (Improved.) 58 days. A very fine, early strain. Fruit very rich, dark green, symmetrical, thick and nearly square ended, vigorous and



Marketer 70 days. A variety of recent introduction, producing very dark green, cylindrical fruits which taper slightly at the ends. Fruits $7\frac{1}{2}$ to 8 inches long, $2\frac{1}{4}$ inches in diameter. White spined. Vines vigorous and prolific. Its uniform shape and attractive color make it an excellent market variety. Oz., 29c; ½ lb., 75c; 1 lb., \$2.50, postpaid.

★Improved "A & C"

68 days. The vigorous growing, disease-resistant vines produce an abundance of uniform, exceedingly dark green Cucumbers, averaging 10 inches long. The fruits are of uniform diameter from stem to blossom end, are rather slim, averaging 1^{1}_{4} to 1^{1}_{2} inches in diameter, without any bulge

in the center, and with practically no taper at the ends. Oz., 20c; 1/1 lb., 60c; 1 lb., \$2.00, postpaid.

Chicago Pickling, or Westerfield's heavy yield. A very prolific variety combining all the qualities desired by those who raise Cucumbers. Fruits are of uniform size and good color. Used almost exclusively by all large pickling houses. Ready for market in 58 days. Oz., 20c; 1/4 lb., 50c; 1 lb., \$1.50, postpaid.

Straight-8 62 days. This outstanding variety produces symmetrical cylindrical fruits about 8 inches in length, and about 1½ inches in diameter. The fruits are well rounded at the ends. This is an ideal shipping variety. Oz., 20c; 1/1 lb., 60c; 1 lb., \$2.00, post-

Longfellow Cucumber 72 days. An excellent long, slender, dark green variety, equally desirable for greenhouse forcing or outdoor culture. 12 to 14 inches long by 2½ inches in diameter. Fairly early, a good healthy grower; very productive. Oz., 20c; ¼ lb., 60c; 1 lb., \$2.60, postpaid.

Davis' Perfect 58 days. Is one of the most prolific sorts. The fruit is long, slim and holds its color till nearly ripe. Oz., 20c; ¼ lb., 75c; 1 lb., \$2.50, postpaid.

Kale or Borecole

CULTURAL DIRECTIONS. One ounce to 150 feet of drill. Sow from August 15th to October in rows 18 inches apart, and they will yield greens during fall and winter. They are improved by freezing.

Dwarf Curled Scotch 110 days. A handsome, very finely curled, dwarf, spreading variety, foliage long and an attractive bright green; very hardy. Oz., 20c; ¼ lb., 60c; 1 lb., \$2.00, postpaid.

Tall Curled Scotch 110 days. Plants of this variety grow 2 to 3 feet in height, bearing long plumelike light green leaves, which are much cut and deeply curled at the edges. Very hardy. Oz., 20c; ½ lb., 60c; 1 lb., \$2.60, postpaid.

Eggplant

CULTURAL DIRECTIONS. One ounce to 1000 plants. Seed germinates very slowly and requires warm ground. Start in hotbeds in March, transplant about June 1st, in rows about three feet apart and two feet apart in the row. Eggplant requires a rich soil, free from disease and rotation of crop is recommended.

Black Beauty 80 days. Early and productive. Fruit large and of rich, glossy black color. Oz., 50c; 1/4 lb., \$1.75; 1 lb., \$6.50, postpaid.

New York Purple 80 days. A favorite market variety. Fruits large, spreading and spineless, producing 4 to 6 large, oval fruits of dark purple color. Oz., 50c; ½ lb., \$1.75; 1 lb., \$6.50 postpaid.

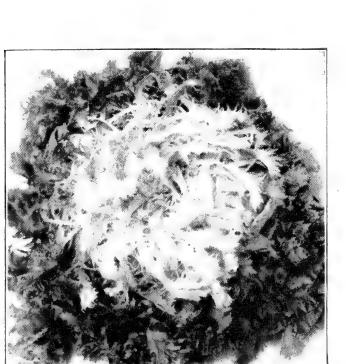
Endive

CULTURAL DIRECTIONS. One ounce to 150 feet of drill. Sow in rows about 15 inches apart and thin to one foot apart in the row. Sow seed for fall crop in June or July. When nearly full grown, tie outer leaves together bringing them up over the head for blanching. A well balanced fertilizer is recommended.

Long Green Curled 95 days. The most hardy and vigorous being white. After blanching, the leaves make a delicious and appetizing salad. Oz., 20c; 1/4 lb., 50c; 1 lb., \$1.50, post-paid

Moss Curled 95 days. Grows more compact than the green curled and the medium green leaves are finer cut, blanches creamy white. Oz., 20c; ½ lb., 50c; 1 lb., \$1.50, postpaid.

Broad-Leaved Batavian (Escarolle). 90 days. One of the best varieties for salads; leaves of upright growth, broad, more or less twisted and waved, bright deep green, with a nearly white midrib. Inner leaves form a fair head which blanches a creamy white. Oz., 20c; ½ lb., 50c; 1 lb., \$1.50, postpaid.

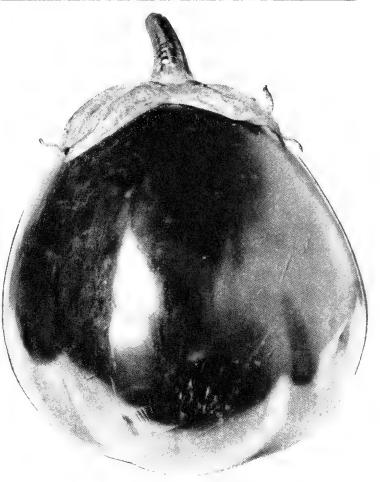


Kohl-rabi Turnip-Rooted Cabbage

CULTURAL DIRECTIONS. One ounce to 200 feet of drill. Seed should be sown in light, rich soil, very early in the spring for early crop, in rows eighteen inches apart and thin to six inches apart in the row. Plantings should be made the latter part of July for fall use. Should be used when young and tender.

Early White Vienna

60 days. Very early, small tops, can be planted close together; best for forcing, or field culture. Oz., 30c; ¼ lb., 95c; 1 lb., \$3.00, postpaid.



Black Beauty Eggplant

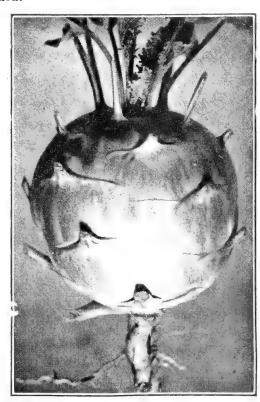
Cress or Pepper Grass

CULTURAL DIRECTIONS. Sow early in the spring in rich, well prepared soil, in rows about fifteen inches apart. Thin to four inches apart in the row.

Extra Curled (Pepper Grass). A small, curled plant having a fine pungent flavor and used as a salad. Should be sown thickly and frequently, covering very lightly as it soon runs to seed. May be cut several times. Oz., 20c; ½ lb., 60c; 1 lb., \$2.00, postpaid.

Collards

True Georgia 75 days. Plant 2 to 3 ft. high forming a cluster of tender, undulated leaves at the top of its rather long stem; used as greens. Oz., 10c; ½ lb., 30c; 1 lb., \$1.00, postpaid.



White Vienna Kohl-rabi

Leek

150 days. Stem about 10 inches American Flag long by 2 inches thick. A strong, vigorous plant with mild flavor. One of the best sorts for the market garden. Oz., 50c; 1/4 lb., \$1.50;

1 lb., \$5.00, postpaid.

Dephant (Monstrous Carentan). 150 days. Large thick. Leaves very dark green, hardy, prolific, for fall and early winter use. Oz., 50c; ¼ lb., \$1.50; 1 lb., \$5.00, postpaid.

Leaf Lettuce

CULTURAL DIRECTIONS. One ounce to 150 feet of cultural directions. One ounce to 150 feet of drill. Lettuce requires rich soil to grow best quality. Mix pulverized hen manure with the soil and sow seed very early in the spring. For Leaf Lettuce, sow in rows twelve inches apart and do not thin until plants are big enough to use. Head Lettuce should be sown in rows twelve inches apart and thinned to eight inches apart in the row. During warm weather, germination may be greatly aided in firming the seed bed, and sowing the seed shallow. Keep the soil moist until germination is completed.

★ Grand Rapids Forcing, Washington Strain

45 days. This splendid strain is one of the favorite strains, being used by all of the larger greenhouse growers who recommend it as a superior Lettuce. Mr. R. Yonker, one of our leading greenhouse growers, by careful plant selection, has kept it up to its original purity. It is absolutely true to type. Color a light green; heads very heavy; leaf crisp, tender and curly; quality the best. We grow our stock seed in the greenhouse and send to one of the best seed grow-

ers on the Coast to grow the seed crop. Oz., 20c; ½ lb., 60c; 1 lb., \$2.00, postpaid.

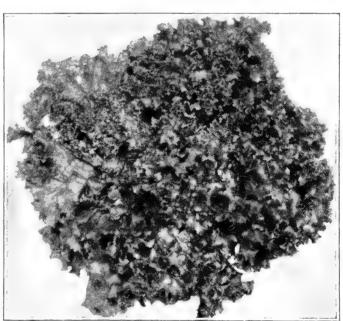
Grand Rapids Tip-Burn Resistant

45 days. Color light green, somewhat like the Washington strain, being used for greenhouse growing where tip-burn is visible. Oz., 20c; 1/4 lb., 60c; 1 lb., \$2.00, postpaid.

Slobolt A new variety of the Grand Rapids type that is slow to bolt, developed by the United States Dept. of Agriculture and has a definite characteristic for with-standing high growing temperatures. Large, erect, compact, leaves broad, wavy, heavily fringed on the edges, tender. of light green color. Oz., 40c; 1/4 lb., \$1.20; 1 lb., \$4.00, postpaid.



Grand Rapids Forcing, Washington Strain



Black-Seeded Simpson

Early Curled Simpson

days. An loose leaf variety. One of the best sorts for the home garden. Oz., 15c; ½ lb., 50c; 1 lb., \$1.75, postpaid.

★ Black-Seeded

Simpson 40 days. One of the best loose leaf varieties for home garden or for the market garden, for outdoor sowing. Can be grown all through the season, very tender. Oz., 15c; ¼ lb., 50c; 1 lb., \$1.75, postpaid.

Prizehead 45 days. A crisp and tender loose-leaved, non-heading sort, color light brown on a medium green base, quality good. Oz., 15c; ¼ lb., 50c; 1 lb., \$1.75, postpaid.

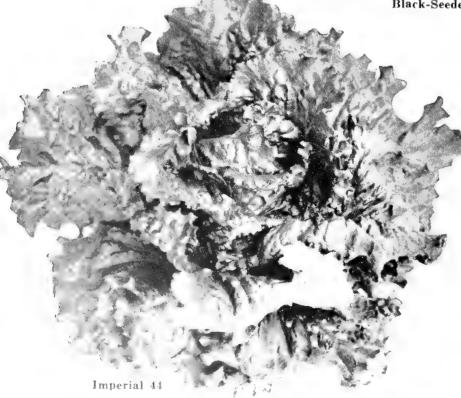
Chicken Tall, leafy, prolific. Dark green. Oz., 15c; 1/1 lb., 50c; 1 lb., \$1.75, postpaid.

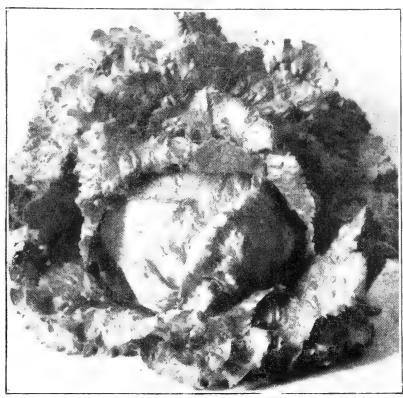
Lettuce, Oak-Leaved 43 days. A distinct Lettuce. Leaves are smooth but are deeply lobed to resemble the leaf of an oak tree. Medium large size, spreading, fairly dark green. Leaves are thick, succulent and tender. Oz., 20c; 1/1 lb., 60c; 1 lb., \$2.00, postpaid.

Head Lettuce

Big Boston 76 days. Heads best in cool weather of early spring and late fall. We do not recommend it for the hot summer months. Oz., 15c; 1/4 lb., 50c; 1 lb., \$1.75, post-

White Boston 76 days. Has a fine, large, solid leaves, but does not have the brown edges. A tightly folded heart that blanches to a bright, creamy yellow shade. It is sweet and crisp. Oz., 15c; 1/4 lb., 50c; 1 lb., \$1.75, postpaid.





New York or Wonderful

Head Lettuce—Continued

Great Lakes 83 days. A heading variety of the Imperial type, developed by the U. S. Dept. of Agriculture and the Michigan State College. Leaves large and well folded; heavy ribs. Shows considerable resistance to tip-burn and ability to head under adverse conditions. Oz., 40c; ½ lb., \$1.50; 1 lb., \$5.00, postpaid.

Imperial 847 83 days. Resistant to brown blight. Crisp heading plants of medium size. Leaves smooth, thick, medium light green. Heads round, well folded and firm. Oz., 30c; ½ lb., 90c; 1 lb., \$3.00, postpaid.

Bibb Lettuce Oz., 20c; 1/4 lb., 60c; 1 lb., \$2.00, postpaid.

postpaid.

Cos Lettuce

★ Imperial No. 152 82 days. New heading variety that is outstanding over other varieties. Resistant to brown blight, and well adapted for early fall planting. The heads are medium sized, hard, and attractive. Oz., 30c; ½ lb., 90c; 1 lb., \$3.00,

Imperial 44 82 days. This is somewhat similar to Imperial 152, being a hybrid from this popular variety. It has very long well-folded leaves and produces hard well-formed heads under ideal circumstances. Oz., 30c; ½ lb., 90c; 1 lb., \$3.00, postpaid.

Read Roy E. Biles' "GARDEN MAGIC"

320 pages, 17 full color illustrations, hundreds of line drawings; practical, durable binding and gilt stamped; size 8x1034 inches. \$3.50. postnaid. ALSO the MODERN FAMILY GARDEN BOOK, 160 pages, fully illustrated; size 7x10½ inches.

\$1.50, postpaid.
Plus 3% Michigan Sales Tax.

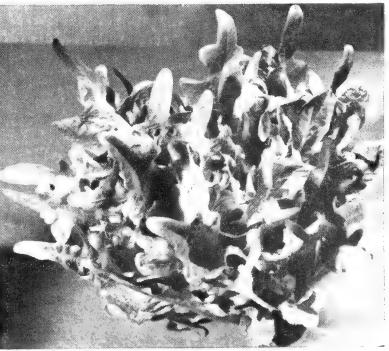
Imperial 456 82 days. Also known as Cornell 456. A true selection of the Imperial type. This strain shows greater resistance to tip burn than does the Imperial No. 44. Particularly adapted for muck soils. Frame and head slightly smaller than Great Lakes, but makes a firmer and harder head. It is a lighter green in color, and is also resistant to early bolting. Oz., 40c; 1/4 lb., \$1.50; 1 lb., \$5.00, postpaid.

New York No. 515 Improved 81 days. Medium size, compact plant, but produces heads of good size. Head leaves quite upright at early stages of growth, but at maturity the heads are round and well formed. Color a rather light bright green. Oz., 30c; 1/4 lb., 90c; 1 lb., \$3.00, postpaid.

New York or Wonderful 75 days. A large, late globular heading variety, leaves broad, of thick texture, fairly blistered and crumpled, and the borders frilled; color dark green, quality good. Known in California and the West as "Los Angeles" and shipped to eastern markets under the misleading name of "Iceberg." For an all-season variety it stands unrivaled. Oz., 30c; ½ lb., 90c; 1 lb., \$3.00, postpaid.

Romaine or Early White
Self-Folding Lettuce 66 days.
Sider this the very best strain of the Cos variety. Very uniform in type, and forms a compact, firm head. Color dark green outside and beautifully blanched inside. Very crisp; sweet. Oz., 20c; 1/4 lb., 60c; 1 lb., \$2.00, postpaid.

Dark Green Cos 70 days. A medium large dark green variety which forms a good sized, firm, well folded head. Oz., 20c; 1/4 lb., 60c; 1 lb., \$2.00, postpaid.



Oak Leaved Lettuce

Muskmelons

CULTURAL DIRECTIONS. One ounce will plant 50 hills, two pounds an acre. Melons do best in a rich, sandy soil. Hills should be from four to six feet apart. Plant ten to twelve seeds to the hill. Cover seeds with an inch of soil. When danger from frost and insects is past, thin to four good plants to the hill.

*Hearts of Gold 88 days. A splendid small, midseason variety. Fruit round, 6 inches long and 5½ inches in diameter, weighing 3 to 3½ lbs., with a tendency to heart shape, lightly ribbed and covered with a fine gray netting; flesh very thick, deep salmon color, and of high quality; a good shipping Melon. Oz., 20c; 1/1 lb., 60c; 1 lb., \$2.00, postpaid.

★ Honey Rock 80 days. One of the most prolific varieties grown. The fruit is round, slightly flattened at the ends, 5 to 6 inches in diameter, weighing 3 to 4 lbs., and distinctly netted. The flesh is soft pink with a greenish tint. The rind is hard and the flesh so firm that it is an excellent shipper. Oz., 20c; 1/1 lb., 60c; 1 lb., \$2.00, postpaid.



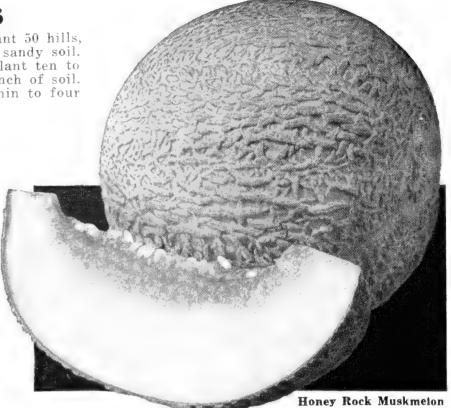
Hearts of Gold

Pride of Wisconsin (Market King). 85 days. Similar in size and shape to Honey Rock. Oval in shape with tough, heavily netted rind. 6 inches long and 51/2 inches in

diameter, weighing 3½ to 4½ lbs. Flesh deep orange and very thick. Sweet and of excellent quality. Oz., 20c; 1/4 lb., 60c; 1 lb., \$2.00, postpaid.

Hale's Best No. 936 82 days. early; a good shipper, oval in shape, averaging 5 in. in diameter and 7 to 9 in. long, with heavy netting, and fairly pro-minent ribs. The flesh is a rich deep salmon color with a very fine flavor. Oz., 20c; 1/4 lb., 60c; 1 lb., \$2.09, postpaid.

No. 10 PYROCIDE DUST is the control measure against beetles and other insects. Apply promptly and grow your Melons without any trouble. Circular free on request.



Bender's Surprise 90 days. Delicious, salmon fleshed Melon, medium to large; oval, distinctly ribbed and covered with slight patches of netting; skin light yellow when ripe. Oz., 20c; ¼ 1b., 60c; 1 lb., \$2.00, postpaid.

Iroquois 90 days. This new melon has definite resistance to Fusarium wilt. Fruits are round to oval, about

6½ inches in diameter, with prominent ribs and good netting; the rind is tough and holds up well. Flesh is deep

ting; the rind is tough and holds up well. Flesh is deep orange color, of fine texture and excellent quality. Oz., 25c; ¼ lb., 70c; 1 lb., \$2.25, postpaid.

Schoon's Hard Shell 90 days. Thick, oval, prominent ribbing with abundant coarse netting, skin gray-green becoming yellow at maturity; flesh very thick, deep salmon-orange, well flavored, excellent quality. 6½ to 7½ inches in diameter, weighing 5 to 7 lbs. Oz., 25c; ¼ lb., 70c; 1 lb., \$2.25, postpaid.

Extra Early Osage 84 days. Standard variety of splendid quality for nearby markets and home gardens. Fruits 6 to 7 inches long; almost round; with shallow furrows and sparse shallow netting. Flesh very thick;

low furrows and sparse shallow netting. Flesh very thick; salmon-ornage; fine grained, sweet and aromatic. Oz., 25c; V_1 lb., 70c; 1 lb., \$2.25, postpaid.

Osage or Miller's Cream 92 days. Splendid Melon for home or market garden. Fruits 7 inches long and 61/2 inches in diameter. Almost round; dark green skin that shows trace of yellowing at ripening stage, slightly netted and ribbed, flesh very thick, juicy, sweet, spicy, deep salmon-orange. Oz., 25c; ½ lb., 70c; 1 lb., \$2.25, postpaid.



Pride of Wisconsin

Selected Varieties of Watermelon

CULTURAL DIRECTIONS. One ounce to 30 hills, about four pounds per acre. Watermelons want rich, sandy soil. Cultural directions the same as for Muskmelons, except the hills should be eight feet apart.

Cole's Early 75 days. The best extremely early variety; fruits medium size, broad oval; weighing 10 to 12 lbs., dark green stripes alternate with lighter; rind brittle, flesh bright red of good quality, seeds blackish. Oz., 15c; ½ lb., 40c; 1 lb., \$1.25, postpaid.

Tom Watson 92 days. Produces Melons 18 to 24 inches long by 10 to 12 inches in diameter, weighing 35 to 40 lbs. Flesh deep red and very crisp; melting and of exquisite flavor. Good shipper. Oz., 15c; ¼ lb., 40c; 1 lb., \$1.25, postpaid.

★ Kleckley's Sweet or Monte Cristo

85 days. One of the sweetest melons on the market; medium early, long, averaging 18 to 20 inches, slightly tapering to the stem end, weighing 30 to 40 lbs. Rind very dark green, flesh very bright red and ripens nearly to the rind. Too tender for a shipping Melon, but excellent for market and home garden. Oz., 15c; ¼ lb., 40c; 1 lb., \$1.25, postpaid.

Peerless or Ice Cream 85 days. An old standby. Medium early; fruit oblong, weighing 18 to 20 lbs.; rind light green, mottled and veined; flesh scarlet, solid to center, sweet, melting and delicious. not a good shipper. Oz., 15c; 1/4 40c; lb., \$1.25, postpaid.

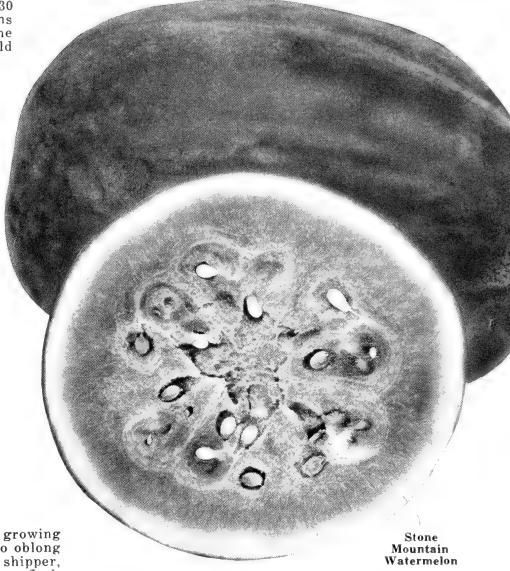
Sweetheart 85 days. A medium early variety growing to a large size; a heavy, round to oblong form with rather thick, tough rind and a good shipper, weighing 20 to 25 lbs. Color very light green, flesh bright red, with black seeds. Oz., 15c; ½ lb., 40c; 1 lb., \$1.25, postpaid.

Citron, Red Seeded 90 days. The old well known redseeded preserving Melon. Oz., 15c; 1/4 lb., 40c; 1 lb., \$1.25, postpaid.

Stone Mountain

90 days. This variety combines extra large size with earliness. It is nearly round in shape, pleasingly green in color and unex celled for sweetness and juiciness. Fruits weigh from 35 to 40 pounds in the South, and the 95 days required for maturity make it easily possible to grow correspondingly large fruits in the North. Oz., 15c; 1/4 lb., 40c; 1 lb., \$1.25, postpaid.

Irish Grey 95 days. Especially valuable for distant light grayish green, rind extremely hard and rough; flesh bright red, of good quality, weighing around 35 lbs. Oz., 20c; ½ lb., 50c; 1 lb., \$1.50, postpaid.



Dixie Queen 85 days. A new variety, for the market and the home garden. Excellent quality, fruit nearly round, with light and dark green stripes, growing to a good size. Rind thin, but tough—flesh bright scarlet, solid, of fine texture, weighing around 30 lbs., Oz., 20c; ½ lb., 50c; 1 lb., \$1.50, postpaid.

Mustard

Southern Giant Curled 30 days. Plant vigorous and growth, leaves large, green tinged yellow, much crumpled and frilled at the edges. Oz., 15c; 1/4 lb., 40c; 1 lb., \$1.25, postpaid.

Large Smooth-Leaf ⁵⁰ days. Large, vigorous leaves, large, broad and oval, deep green, margin toothed but otherwise plain. Oz., 15c; ½ lb., 40c; 1 lb., \$1.25, postpaid.

Kleckley's Sweet or Monte Cristo

Okra or Gumbo

White Velvet 60 days. Plants 3½ feet high, pods white, long, smooth and tender; early and productive. Oz., 10c; ¼ lb., 30c; 1 lb., \$1.00, postpaid.

Perkins Mammoth Long Pod

56 days. For home and market garden. Plants 4 to 5 feet tall, pods dark green, fleshy, tender, becoming 7 to 8 inches long. Distinctly ribbed and tapered. Oz., 10c; ½ lb., 30c; 1 lb., \$1.00, postpaid.

Choice Onion Seed

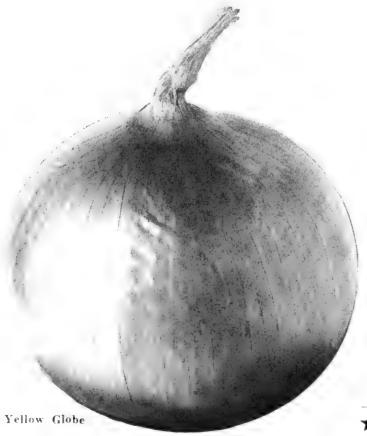
CULTURAL DIRECTIONS. One ounce to 100 feet of drill; about four pounds to the acre. Onions for the market are generally grown on muck land in Michigan, but may be grown for home use on any rich, loamy soil. They appreciate plenty of fertilizer on muck; the market growers apply heavily about a 2-8-16 fertilizer.

Drill in rows about a foot apart.



Buckskin Yellow Globe An exceptionally good yielder that produces very hard bulbs with a tight skin. A splendid keeper. Oz., 50c; 1/4 lb., \$1.25; 1 lb., \$4.50, postpaid.

★Extra Early Yellow Globe 98 days. Excellent semi-globe shaped and is a good yielder. It ripens well, and under normal conditions the bulbs are ready for market 10 days ahead of the Southport Yellow Globe. The color is a rich deep yellow and it can be kept in storage for a limited time. Oz., 50c; ¼ lb., \$1.25; 1 lb., \$4.50, postpaid.

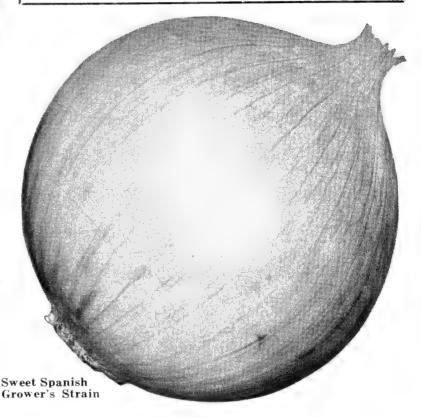


* "BRIGHAM STRAIN" The Long Keeping Onion

109 days. The seed stock for this fine strain of Onion seed is grown under our own supervision. The bulbs used are very carefully selected to insure our users that this variety is pure. Bulbs are selected for type and quality, and produce larger Onions with a vigorous growth. Onions grown from our seed stock are very good keepers, globe shaped with a rich golden color. Oz., 50c; ¼ lb., \$1.25; 1 lb., \$4.50, postpaid.

Southport Yellow Globe 110 days. This Onion is our yellow market variety. It is very uniform as to size. A good yielder, and recommended for its booring. A good yielder, and recommended for its booring. ommended for its keeping qualities in storage. A handsome yellow globe variety. Oz., 50c; ½ lb., \$1.25; 1 lb., \$4.50, postpaid.

We will be pleased to quote you special prices on larger quantities. Specify the amount you want and let us quote you.



Sweet Spanish

Michigan State Sweet Spanish This is an improved strain of Sweet Spanish, developed by Dr. Harmer of the Michigan State College. It has been selected and developed for a long keeping

It has been selected and developed for a long keeping storage Onion. Very productive, good color, and fine for shipping. Oz., 50c; ¼ lb., \$1.60; 1 lb., \$5.50, postpaid.

Utah Sweet Spanish 110 days. Desirable because of its deep yellow color, excellent keeping qualities, thicker skin and uniformity in size. Bulbs are globe in shape at about 2½ to 3 inches, when larger they assume a slightly flattened globe shape. Flesh white and of mild, pleasing flavor. Oz., 50c; ¼ lb., \$1.50; 1 lb., \$5.00, postpaid. lb., \$5.00, postpaid.

Sweet Spanish, Grower's Strain 110 days. The largest yielder of the yellow Onions, averaging 3 to 4 inches in diameter. The best and not susceptible to the attack of thrip. Good keeper and shipper. Oz., 50c; 1/4 lb., \$1.50; 1 lb., \$5.00, postpaid.

White Sweet Spanish 110 days. Similar to the original Sweet Spanish, except that it is white with glistening skin. Globe-shaped. Oz., 50c; 1/4 lb., \$1.60; 1 lb., \$5.50, postpaid.

This variety recommended by the Michigan State College.

ONION SEEDS—Continued

Ebenezer An excellent variety for producing sets of exceptional keeping qualities. Bulbs deep flat, of medium size; dark yellow, very firm with thick skin. Oz., 40c; ½ lb., \$1.20; 1 lb., \$4.00, postpaid.

Prizetaker or Mammoth Yellow Spanish 105 days. Very nearly round, light straw color, very mild and sweet. Late. Oz., 50c; 1/4 lb., \$1.50; 1 lb., \$5.00, postpaid.

Yellow Globe Danvers 105 days. A popular dependable variety. Is an exceptional keeper. Oz., 50c; ¼ lb., \$1.50; 1 lb., \$4.25, postpaid.

★Southport White Globe 120 days. Same type as South-thin delicate skin of pure paper whiteness, but two weeks earlier and exceedingly mild. It usually commands the highest price on the market. Oz., 50c; ¼ lb., \$1.60; 1 lb., \$5.50, postpaid.

White Portugal or Silverskin white Onion of mild flavor. Used mostly to grow sets. Oz., 50c; 1/4 lb., \$1.50; 1 lb., \$5.00, postpaid.

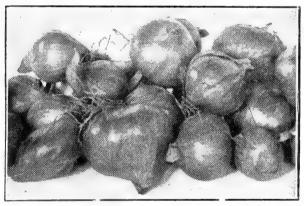
White Barletta 65 days. One of the earliest, handsomest and smallest of white pickling Onions. Makes a good bunching sort. Oz, 25c; 1/4 lb., 75c; 1 lb., \$2.50, postpaid.

White Welch one of the best for bunching as green Onions. Very hardy. The white shoots make a rapid growth and are ready for market ahead of those from sets. Mild and delicate in flavor. Oz., 25c; ½ lb., 75c; 1 lb., \$2.50, postpaid.

Long Bunching (Heshiko) (American Grown). A new perennial bunching onion that does not form a bulb. Oz., 50c; 1/4 lb., \$1.50; 1 lb., \$5.00, postpaid.

Chives

A hardy perennial of the Onion type. Listed under "Herbs" on page 26. Pkt., 10c; oz., \$1.00; 1/4 lb., \$3.00; 1 lb., \$10.00, postpaid.



Onion Sets and Plants

We can supply the Silverskin, Yellow Ebenezer, Yellow Globe or the English Multiplier sets, as well as Texas Bermuda Onion plants, and will solicit your inquiries.



"Paramount" Moss-Curled Parsies



Hollow Crown Parsnip



Southport White Globe

Parsley

CULTURAL DIRECTIONS. One ounce to 150 feet of drill. Seed germinates very slowly. Sow thickly in rows about 15 inches apart, and thin to four or five inches apart in the row. Parsley requires a rich soil.

Triple Curled or Moss Curled 85 days. (Paramount.) Plant handsome, beautifully curled and rapid grower. Will produce a large crop. Oz., 15c; 1/4 lb., 45c; 1 lb., \$1.25, postpaid.

Hamburg Rooted ⁹⁰ days. Grown for the root which resembles a Parsnip in shape and color. Foliage very much like plain Parsley. Oz., 15c; ½ lb., 45c; 1 lb., \$1.25, postpaid.

Parsnips

CULTURAL DIRECTIONS. One ounce will sow 100 feet of drill; three to four pounds per acre. Sow in April or May. Parsnips require a long season to mature. Sow thickly, thin as for Carrots. Seed does not germinate well unless conditions are just right.

Hollow Crown 130 days. Thick shoulder. This variety is more generally grown than any other sort; roots smooth, tender and sugary. Oz., 10c; ¼ lb., 30c; 1 lb., \$1.00, postpaid.

Long Smooth Dutch or Sugar 130 days. Roots wery long, slim, much sweeter than the Hollow Crown. Oz., 10c; 1/4 lb., 30c; 1 lb., \$1.00, postpaid.

Short Thick 100 days. A fine bunch vegetable, tops one-half size of Hollow Crown. Short, thick roots, free from strings, flavor much more delicate than other varieties of Parsnips. Fully a month earlier than Hollow Crown and reaches maturity in 100 days. Oz., 10c; ½ lb., 30c; 1 lb., \$1.00, postpaid.

Strawberry Plants

Dunlap, Premier or Everbearing. We will have good, sturdy plants in season, and solicit your inquiries.

Garden Peas

CULTURAL DIRECTIONS. One quart will plant 100 feet of drill; about 56 pounds per acre. Peas do best on rich, sandy loam that has been well manured the previous season. Plant smooth, early sorts as soon as the ground can be worked in the spring. The wrinkled varieties are liable to rot if the soil is cold and wet, and should be planted later.

Little Marvel or Dark Podded Sutton's Excelsior 60 days. One of the second early sorts. Pods long, 3 to 4 inches, filled with deliciously sweet Peas. Vines about 15 inches tall. Lb., 36c, postpaid. Not prepaid, 5 lbs., \$1.40; 14 lbs., (1 pk.), \$3.75; 56 lbs., (1 bu.), \$14.60.

Little Gem pods on both sides of the stalk, beginning near the ground.

Little Gem 58 days. A second early, hardy variety. Prolific, bearing pods on both sides of the stalk, beginning near the ground. Pods medium length, round, and well filled to the end. Height of vine about 15 inches. Seed green, wrinkled. Lb., 30c, postpaid. Not prepaid, 5 lbs., \$1.40; 14 lbs. (1 pk.), \$3.75; 56 lbs. (1 bu.), \$14.00.

Alaska Grand Amala, smooth blue Pea, and one of the earliest.

Alaska Grown largely by canners and market gardeners for early crop. Vines about two feet in height, pods small, but well filled. Can nearly all be harvested at one picking. Lb., 30c, postpaid. Not prepaid, 5140: 15 lbs. (1 pk.) \$3.25: 60 lbs. (1 bu.), \$12.50.

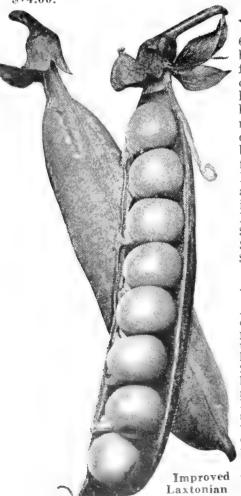
nearly all be harvested at one picking. Lb., 30c, postpaid. Not prepaid, 5 lbs., \$1.40; 15 lbs. (1 pk.), \$3.25; 60 lbs. (1 bu.), \$12.50.

American Wonder Peas. Vines very dwarf and productive. Pods small, but well filled. The most delicious Pea for the home garden. Lb., 30c, postpaid. Not prepaid, 5 lbs., \$1.40; 14 lbs. (1 pk.), \$3.75; 56 lbs. (1 bu.), \$14.00.

★ Improved Laxtonian 62 days. The best of the Laxtonian type. Second early. A little earlier than the Gradus. Vine 16 inches high, sturdy, dark green and productive; pods dark green, four inches, broad, containing eight large peas of excellent quality. The best second early, big-podded sort. Suitable for quick freezing. Lb., 30c, postpaid. Not prepaid, 5 lbs., \$1.40; 14 lbs., (1 pk.) 83.75; 56 lbs. (1 bu.), \$14.00.

Champion of England Pods 2 to 3 inches long, broad and well filled. Peas medium size, of unsurpassed sweetness. Lb., 30c, postpaid. Not prepaid, 5 lbs., \$1.40; 14 lbs. (1 pk.), \$3.75; 56 lbs. (1 bu.), \$14.00.

★ World's Record 58 days. A new variety on the order more productive and true to a fixed type. Grows about 2 feet in height, with large, dark green pods nearly 4 inches in length, broad, pointed and always well filled with large, sweet peas of splendid quality. An excellent, profitable sort for home or market garden. Suitable for quick freezing. Lb., 30c, postpaid. Not prepaid, 5 lbs., \$1.40; 14 lbs. (1 pk.), \$3.75; 56 lbs. (1 bu.), \$14.00.

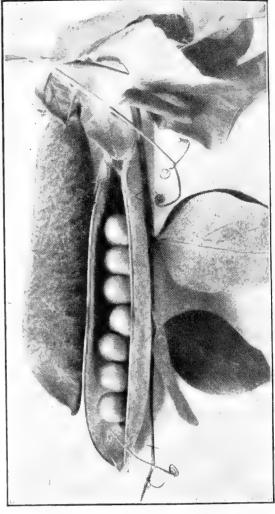


★ Thomas Laxton

62 days. One of the best second early sorts for the market gardeners. Vines of same height as the Gradus, but a little earlier, more hardy and productive. Pods long, blunt-ended and well filled with large Peas. Peas wrinkled. Suitable for quick freezing. Lb., 30c, postpaid. Not prepaid, 5 lbs., \$1.40; 14 lbs., (1 pk.), \$3.75; 56 lbs., (1 bu.), \$14.00.

★ Dwarf Telephone

A splendid main crop Pea, coming between the Telephone and Stratagem. Of the Stratagem type, but a heavier yielder. Height 2½ feet. Foliage very heavy, sturdy and dark green. Pods 4¼ inches long, dark green, broad, straight and pointed, containing nine large, medium dark green peas of the best quality. Suitable for quick freezing. Lb., 30c. postpaid. Not preraid, 5 lbs., \$1.40; 14 lbs. (1 pk.), \$3 75; 56 lbs., (1 bu.), \$14.00.



Little Marvel Peas

★ Alderman 72 days. A little later than the Telephone. Vines about four feet in height; very heavy foliage. One of the most productive sorts. Pods long, dark green, well filled; seed wrinkled. Suitable for quick freezing. Lb., 30c, postpaid. Not prepaid, 5 lbs., \$1.40; 14 lbs. (1 pk.), \$3.75; 56 lbs., (1 bu.), \$14.00.

Laxton's Progress 60 days. Splendid variety for home, market garden and shipping. Vines dwarf, about 22 inches, dark green, prolific. Pods 4½ inches long, handsome; dark green; plump, tapered at ends. Seeds large, wrinkled, cream, interior yellow. Suitable for quick freezing. Lb., 30c, postpaid. Not prepaid, 5 lbs., \$1.40; 14 lbs. (1 pk.), \$3.75; 56 lbs. (1 bu.), \$14.00.

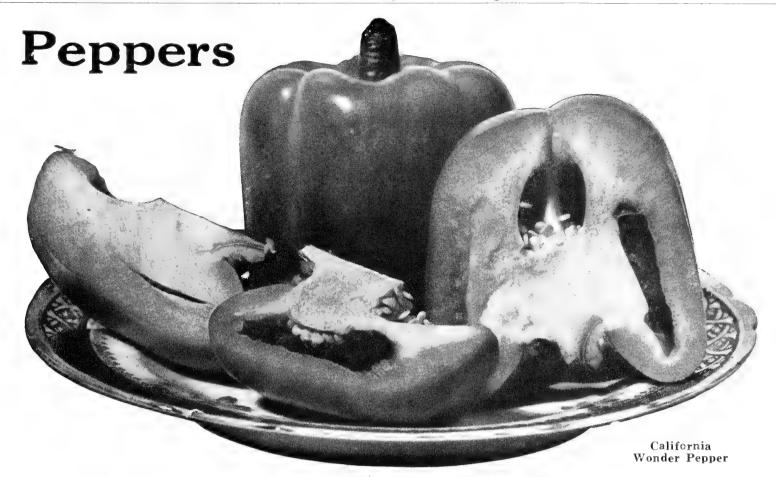
Telephone 72 days. A standard high quality, large-podded Pea, for main crop; productive; height 4½ feet. Vine and foliage strong and heavy, medium green. Pods 4½ inches long. medium green, straight, broad and pointed, well filled. Suitable for quick freezing. Lb., 30c, postpaid. Not prepaid, 5 lbs., \$1.40; 14 lbs. (1 pk.), \$3.75; 56 lbs. (1 bu.), \$14.00.

Edible Pod Sugar Peas

The pods of the two varieties listed below are cooked with the peas. They have a high sugar content and make a delicious dish, and once tried, they will be regularly grown.

Dwarf Gray Sugar 62 days. A dwarf, edible pod variety. Vines about two feet high. Cook pods like string Beans. Lb., 30c, postpaid. Not prepaid, 5 lbs., \$1.40; 14 lbs. (1 pk.), \$3.75; 56 lbs. (1 bu.), \$14.00.

Melting Sugar, or Edible Pod 70 days. A tall variety, bearing large, flat, brittle pods. These are sweet and are cut or broken and cooked like string Beans. It is a delicious vegetable and should be better known and more generally used. Lb., 30c, postpaid. Not prepaid, 5 lbs., \$1.40; 14 lbs. (1 pk.), \$3.75; 56 lbs. (1 bu.), \$14.00.



CULTURAL DIRECTIONS. One ounce will produce about 2000 plants; about 7000 plants for an acre. Sow seeds in hotbeds from February to April; transplant to open ground when all danger from frost is past, in rows about three feet apart and eighteen inches apart in the row. Seed can be sown in the open ground late in May, and thinned as above. Cover seed about half an inch.

California Wonder

72 days. Thickness of flesh alone, which is often 3% of an inch. places this sweet pepper above all others. Vigorous growing plants, blocky fruit 5 inches long and 4 inches wide. When fully matured, it has a waxed appearance. Oz., 50c; 1/4 lb., \$1.75; 1 lb., \$6.00, postpaid.

Oakview Wonder ⁶³ days. An earlier and more productive strain of California Wonder. Fruits blocky, smooth, with thick, mild, sweet flesh. Plants shorter and stockier but fruits are set earlier and more abundantly. An outstanding strain unsurpassed for shipping and for the home and market garden. Oz., 70c; ½ lb., \$2.20; 1 lb., \$7.00, postpaid.

Chinese Giant 80 days. Mammoth fruits 12 to 15 inches mild and sweet. Oz., 70c; 1/4 lb., \$2.20; 1 lb., \$7.00, postpaid.

Harris' Early Giant
63 days. The earliest and most prolific of all large Peppers. Is of dwarf, compact growth, bearing as many as 12 pendent fruits on a single plant. Fruit scarlet, measuring 5 inches long by 3½ inches in diameter; three-lobed, mild and sweet. A profitable Pepper for the market. Oz., 65c; ¼ lb., \$2.00; 1 lb., \$6.50, postpaid.

Pimento 73 days. A rather late, very thick-fleshed, much used for salads. Oz., 50c; 1/4 lb., \$1.75; 1 lb., \$6.00, postpaid.

Long Red Cayenne 70 days. Pendent fruits about 5 inches long and 34 inch in diameter at the base, often curved and twisted; bright red. hot and pungent. Oz., 50c; 1/4 lb., \$1.75; 1 lb., \$6.00, postpaid.

Hungarian Yellow Sweet 60 days. Considered the first early Pepper in the season. Plant is 12 to 15 inches in height, very hardy, and prolific, bearing fruit both upright and pendant. The fruit is from 5½ to 6 inches long by 1½ inches in

diameter, tapered, smooth flesh; is fairly thick and pungent. Color is waxy yellow, becoming a bright red at maturity. Oz., 65c; 1/4 lb., \$2.25; 1 lb., \$8.00, postpaid.

Hungarian Yellow Wax (Hot.) 60 days. Very early. Desirable for home, market garden and canning. Plants small, heavily productive. Fruits 6 to 7 inches long, 2 inches thick, tapered, smooth, waxy light yellow becoming bright red. Flesh thick, pungent. Oz., 50c; ½ lb., \$1.75; 1 lb., \$6.00, postpaid.

Sweet Banana 65 days. The plant is 20 to 24 inches tall, upright, dark green, very vigorous, heavy foliage of large leaves. Fruit 6½ to 7½ inches long, 1½ inches in diameter, tapered to the point with very slight curve; sweet, medium flesh wall, light yellow turning to bright red at maturity. Is an excellent variety for home and garden. Oz., \$1.00; ¼ lb., \$3.00; 1 lb., \$10.00, postpaid.

Bull Nose or Large Bell 55 days. Large, bell-shaped, thick-fleshed fruit. Good for Mango pickles. Oz., 50c; 1/4 lb., \$1.75; 1 lb., \$6.00, post-paid.

World Beater 70 days. The most prolific large Pepper. Fruit very large, about 5 inches long. Flesh thick, mild and sweet. Pepper tapering and of a bright ruby color when ripe and very attractive. Oz., 50c; ¼ lb., \$1.75; 1 lb., \$6.00, postpaid.

Ruby King 65 days. One of the most profitable and satisfactory varieties for the home or market garden; plants are early, productive and of dwarf compact, upright growth; fruits pendent, often 4 to 6 inches long by 3 to 4 inches thick, tapering and of a bright ruby-red color; flesh is thick, mild and sweet. Oz., 50c; ½ lb., \$1.75; 1 lb., \$6.00, postpaid.

Red Chili 85 days. Small, red, cone-shaped. Very hot and prolific. Used for seasoning. Oz., 40c; 1/4 lb., \$1.50; 1 lb., \$5.00, postpaid.

Neapolitan 60 days. A very early, medium large, prolific variety. Fruits upright in growth, three-lobed, yellowish green, becoming bright red, flesh extremely mild and sweet. Oz., 50c; ½ lb., \$1.75; 1 lb., \$6.00, postpaid.

Pumpkins

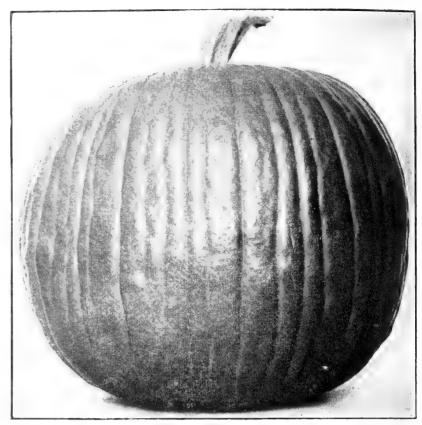
CULTURAL DIRECTIONS. One oz. of seed for 20 hills. About 3 pounds per acre. Usually grown in cornfields, but can be grown as a separate crop. Seed should be planted in hills 8 to 10 feet apart each way, after soil gets warm. Cultivate until vines begin to run. Cut Pumpkins after leaves die, leaving 3 to 4 inches of stem attached to fruit. Store in a dry place, and do not bruise.

Connecticut Field 70 days. Generally used for planting in Corn for stock feeding; also makes good pies. Oz., 20c; 1/4 lb., 50c; 1 lb., 81.50, postpaid.

King of the Mammoths 120 days. The giant among Pumpkins. Often grows two feet or more in diameter. Oz., 20c; 1/4 lb., 50c; 1 lb., \$1.50, postpaid.

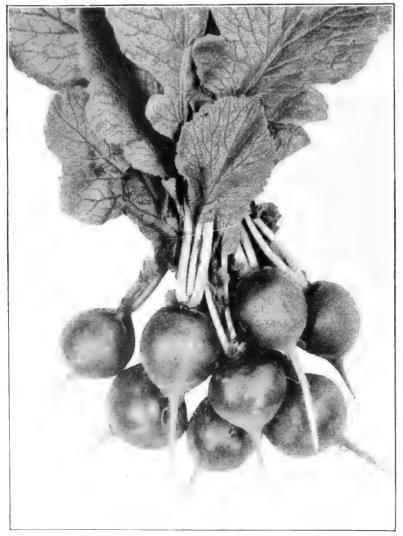
★Sugar Pie 108 days. Fruit small, round, flattened at the ends, and slightly ribbed. Skin and flesh deep orange-yellow. Flesh very thick and of high quality. Oz., 20c; ¼ lb., 50c; 1 lb., \$1.50, postpaid.

Winter Luxury 100 days. Round, medium in size, with a golden yellow skin closely netted like a netted muskmelon; sweet and finely flavored and an excetionally good keeper. Oz., 20c; 1/4 lb., 50c; 1 lb., \$1.50, postpaid.



Sugar or Pie Pumpkin

Radishes



Early Scarlet Globe

CANADIAN CUSTOMERS

We will accept your order only on remittance payable in United States funds or its equal. Notice announcement on page 3.

★ Early Scarlet Globe 20 days. We have an exceptionally fine stock of this grand variety, which has been tested by having crops grown both in greenhouses and outdoors. Our new stock will not be sold until it is tested. It is one of the earliest forcing radishes, and does equally as well for outdoor culture. Roots are globe-shaped, of fair size, not apt to be pithy, small tops, crisp and tender, color bright scarlet. A scarlet globe variety with a medium top. Oz., 10c; ¼ lb., 30c; 1 lb., \$1.60, postpaid. Not prepaid, 10 lbs., 85c per lb. 25 lbs. or more at 75c per lb.

★Grand Rapids Forcing 20 days. New, improved. The best greenhouse variety and the earliest of the Scarlet Globe type, but superior in every way for greenhouse forcing. When properly grown it is the most handsome and best forcing sort with the shortest top and the Radishes are ready to pull before you realize it on this account. A scarlet globe variety with a short top. Oz., 10c; ¼ lb., 30c; 1 lb., \$1.00, postpaid; 10-lb. lot, 85c per lb., not postpaid. 25 lbs. or more at 75c per lb.

The Grand Rapids Forcing Varieties are nationally known. Turn to the others: Lettuce is described on page 16; Tomatoes on page 29.

Radishes prefer a deep, rich, sandy soil and an application of a well balanced fertilizer.

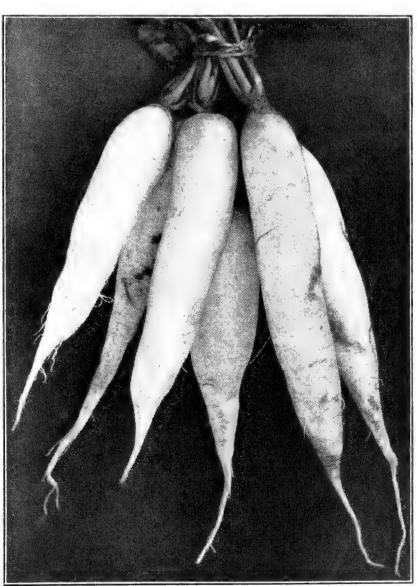
Cavalier 25 days. A highly colored and attractive variety for all purposes and especially for shipping. Tops small, roots oblong-globe, very firm and of bright red color. Especially adapted for growing on muck soils. Oz., 10c; ½ lb., 30c; 1 lb., \$1.00, postpaid. Not prepaid, 10 lbs., 85c per lb.; 25 lbs. or more at 75c per lb.

Comet ²⁵ days. Brightest colored of the bunching Radishes. Globe shaped, suitable for use when % to ¾ inches in diameter, but become much larger without becoming pithy. Tops are slightly larger than Scarlet Globe. Roots attractive, bright clear red. Oz., 10c; ¼ lb., 30c; 1 lb., \$1.00, postpaid.

★ Icicle (Short Top.) 25 days. One of the earliest long varieties, white throughout. Very crisp and tender. Oz., 10c; ¼ lb., 30c; 1 lb., \$1.00, postpaid.

French Breakfast 20 days. Of oblong shape, small, with small white tip. Oz., 10c; lb., 30c; 1 lb., \$1.00, postpaid.

Cooper's Sparkler 20 days. White tip, quite similar to Scarlet Turnip White tip as to size and time of maturity, only the Sparkler is more round or ball-shaped, and the white extends farther up the radish, making a more attractive bulb. Oz., 10c; ½ lb., 30c; 1 lb., \$1.00, postpaid.



White Icicle



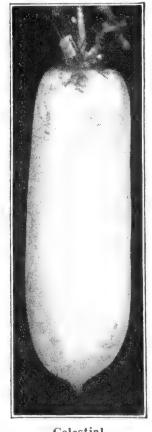
Grand Rapids Forcing Radish

Scarlet Turnip White Tipped scarlet, shading to a white tip at the bottom. Very early. Oz., 10c; ½ lb., 30c; 1 lb., \$1.00, postpaid.

Crimson Giant 28 days. Larger than any other extra early variety but does not become pithy. Crimson-carmine, turnip-shaped, flesh firm, crisp and tender. Oz., 10c; 1/4 lb., 30c; 1 lb., \$1.00, postpaid.

The Best Winter Radishes

White Winter (Celestial.) 60 days. Roots six to eight inches long, thick, cylindrical and smooth, with a beautiful white skin and flesh, the whitest and least pungent of the winter radishes. Oz., 10c; 1/4 lb., 30c; 1 lb., \$1.00, postpaid.



Celestial White Winter

Chinese Rose Winter

52 days. Roots four or five inches long, blunt at both ends, about two inches thick. Skin smooth and bright, deep rose color. Flesh white and crisp. One of the best winter sorts. Oz., 10c; ¼ lb., 30c; 1 lb., \$1.00, postpaid.

Long Black Spanish 56 days. One of the latest and hardiest varieties for winter use; roots 8 to 9 inches long, 2 to 3 inches in diameter, and nearly black in color. Oz., 10c; 1/4 lb., 30c; 1 lb., \$1.00, postpaid.

Round Black Spanish 56 days. Round, 3 to 4 inches in diameter. Skin almost black; flesh white, crisp and pungent. Oz., 10c; 1/4 lb., 30c; 1 lb., \$1.00, postpaid.



American Purple Top Rutabaga

Salsify or Vegetable Oyster

CULTURAL DIRECTIONS. One ounce to 75 feet of drill; 5 or 6 pounds to the acre. Sow the seed early in the spring in drills twelve inches apart and one inch deep. Thin to four or five inches apart. Like Parsnips, they may be left in the ground all winter and dug as soon as the ground is thawed. Salsify prefers a deep, rich sandy soil.

Mammoth Sandwich Island 150 days. A splendid variety producing large, thick, tapering roots. Very uniform, mild and delicious in flavor. A popular sort with the market gardeners. Oz., 40c; 1/4 lb., \$1.25; 1 lb., \$4.50, postpaid.

Rutabagas

Mature in 100 days.

American Purple Top A hardy, productive variety with small tap roots, bright yellow in color with purple top, solid, tender and sweet. Our strain is the best available. Oz., 10c; 1/4 lb., 30c; 1 lb., \$1.00, postpaid.

Canadian Gem (Laurentian Neckless). A strain of Purple Top Swede, much preferred in Canada. Tops short, practically neckless. Roots large, spherical, purplish red above ground, light yellow below. Flesh creamy yellow, firm, mild and sweet. Oz., 10c; 1/4 lb., 30c; 1 lb., \$1.00, postpaid.



Salsify



Rhubarb

Victoria One of the best market sorts; stalks a beautiful red. Oz., 20c; ¼ lb., 50c; 1 lb., \$1.50, postpaid.

Aromatic, Medicinal and Pot Herbs



Sage

For early use, sow seed in hotbed or in open ground in May, in rows one foot apart. Cover very lightly and thin to six inches apart in the row. They should be cut on a dry day, just before they come into full blossom. Tie in bunches and keep where they will dry quickly.

ANISE. Used for garnishing, seasoning and for cordials. Pkt., 10c, postpaid.

BASIL, SWEET. Annual. About 12 inches tall. Entire plant has fragrant, somewhat spicy aroma; used for seasoning. Pkt., 10c.

CARAWAY. Seeds are used for flavoring breads, pastry, meats, etc. Pkt., 10c, post-paid.

CELERIAC or TURNIP-ROOTED CELERY, Giant Prague. Pkt., 10c, postpaid.

CHICORY (French Endive). Used extensively for salads. The new leaf growth forms a compact blanched head with broad, crisp leaves, having a pleasantly sharp flavor. Pkt., 10c, postpaid.

CHIVES. Hardy perennial plants of the onion type. Easily grown from seeds. The small leaves are used for seasoning. Pkt., 10c; oz., \$1.00; 1/4 lb., \$3.00, postpaid.

CORIANDER. The seeds are used for flavoring. Pkt., 10c, postpaid.

DANDELION. Improved thick leaf. Very superior strain. Makes vigorous, very compact growth. Leaves 18 to 24 inches across, thick in texture and blanch readily. Pkt., 10c, postpaid.

DILL. Leaves are used in pickles and for flavoring soups and sauces, Oz., 10c; 1/4 lb., 30c; 1 lb., \$1.00, postpaid.

LAVENDER. True. Perennial. Flowers are dried and placed in the linen closet to impart their perfume to the linens. Also used as a repellent to moths. Pkt., 10c, postpaid.

FLORENCE FENNEL. Grown in home and market garden. Plant 2 to 3 feet tall. Chiefly grown for the bulblike structure formed by the enveloping thickened bases of the stalks of the lower leaves. This is aromatic and of a delicate sweet flavor. Pkt., 10c, postpaid.

SAGE. The most extensively used of any herb. An indispensable perennial. Very aromatic. Oz., \$1.00; pkt., 25c, postpaid.

SAFFRON. Used for coloring certain dishes, also flavoring. Pkt., 10c, postpaid.

SUMMER SAVORY. The leaves and young shoots are used for flavoring. Pkt., 10c, post-paid.

THYME. Hardy perennial, 8 to 10 inches tall, of strong, agreeable, aromatic odor and flavor; used in medicine and for seasoning culinary preparations. Pkt., 10c; 1 oz., \$2.00, postpaid.

Improved Spinach Varieties

IMPORTED TO MEET THE DEMANDS OF THE MOST CRITICAL TRADE

CULTURAL DIRECTIONS. One ounce to 100 feet of drill; eight to ten pounds per acre. Sow early for spring crop; in August for fall use; and if sown from the middle to last of September, and protected during the winter with a light covering of straw, it will be ready for use yearly in the spring.

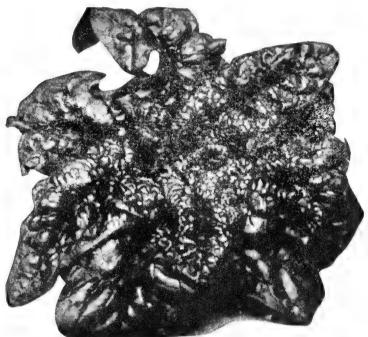
very early in the spring.

A fertilizer high in nitrogen and phosphate is recommended, especially for sandy soils.

During warm weather, germination may be greatly aided by firming the seed bed, and sowing the seed shallow. Keep the soil moist until germination is completed.

★ Long Standing Bloomsdale 42 days. It is early and a decided improvement on the old strain. Will stand ten to fourteen days before bolting to seed; has a heavier leaf texture, more crumpled or savoyed. and will also resist the heat much better. Suitable for quick freezing. Oz., 10c; ¼ lb., 25c; 1 lb., 70c, postpaid. Not prepaid, 10 lbs., \$5.50; 25 lbs. or more, 50c per lb.

Round Summer Thick Leaved 45 days. An old standard. Grand Rapids growers use this variety very largely for main crop for spring, summer and fall. Suitable for quick freezing. Oz., 10c; 1/4 lb., 25c; 1 lb., 70c, postpaid. Not prepaid, 10 lbs., \$5.50; 25 lbs. or more, 50c per lb.

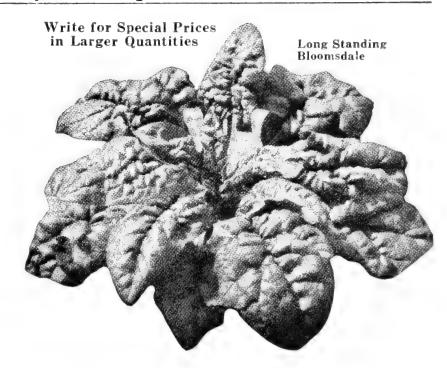


Virginia Savoy Blight Resistant

Giant Nobel 45 days. Similar to Thick Leaf. An erect, vigorous growing, long standing Spinach, slow to run to seed. Leaves large, unusually broad, firm and thick, with rounded top. Smooth, medium green in color and the largest of any Spinach. Suitable for quick freezing. Oz., 10c; ¼ lb., 25c; 1 lb., 70c, postpaid. Not prepaid, 10 lbs., \$5.50; 25 lbs. or more, 50c per lb.

45 days. This new variety may well Viking be described as a dark green Nobel. Excellent for market gardens and canning. Plant large, spreading, vigorous, thick and dark green. Suitable for quick freezing. Oz., 10c; ½ lb., 25c; 1 lb., 70c, postpaid. Not prepaid, 10 lbs., \$5.50; 5 lbs. or more, 50c per lb.

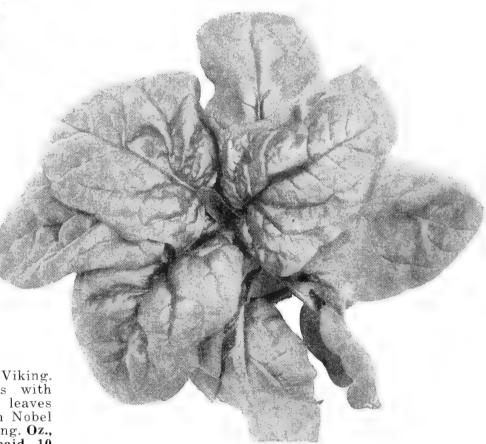
Heavy Pack 48 days. This is a good strain of Viking. Plants are strong and vigorous with large, medium green, slightly crumpled thick leaves on short stalks. Color is intermediate between Nobel and King of Denmark. Suitable for quick freezing. Oz., 10c; ¼ lb., 25c; 1 lb., 70c, postpaid. Not prepaid, 10 lbs., \$5.50; 25 lbs. or more, 50c per lb.



* King of Denmark 48 days. Imported seed to meet the demands of the most critical trade. A standard variety for market gardeners, for spring planting. It will stand longer than any other variety before going to seed. Leaves large, rounded, and somewhat blistered. Color very deep green. Heavy yielder and excellent quality. Suitable for quick freezing. Oz., 10c; 1/4 lb., 25c; 1 lb., 70c, postpaid. Not prepaid, 10 lbs., \$5.50; 25 lbs. or more, 50c per lb.

Virginia Savoy Blight-Resistant Spinach 40 days. Virginia Savoy is characterized by the large leaves and general Flanders type of growth. The low-growing, wide-spreading habit makes it most desirable for winter Spinach. Plants of this type attain a very large size in late fall and carry well into early spring. A single plant often weighs more than a pound. Suitable for quick freezing. Oz., 10c; ¼ lb., 25c; 1 lb., 70c, postpaid. Not prepaid, 10 lbs., \$5.50; 25 lbs. or more, 50c per lb.

New Zealand 60 days. Entirely distinct from the other varieties. Plant tall and spreading, leaves medium green, rather small and pointed. Prickly seeded. Oz., 10c; ½ lb., 25c; 1 lb., 75c, postpaid.



Giant Nobel

Squash

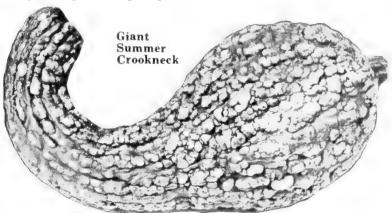
CULTURAL DIRECTIONS. For Summer Squash, one ounce to 25 hills; two to three pounds per acre. For Winter Squash, one ounce to ten hills; about three pounds per acre. After danger of frost is past, plant eight to ten seeds to the hill for Summer sorts, about four feet apart, the last of May; and Winter varieties in hills about eight feet apart, from the middle of June to July first. Do not bruise or break the stems of Winter Squash when gathering. Store in a cool, dry place.

Early Prolific Straightneck 50 days. A high yielding straight, smooth, and of delicate creamy color. Will grow 12 to 14 inches long but can be eaten when smaller. Quality unsurpassed. Oz., 15c; 1/4 lb., 40c; 1 lb., \$1.25, postpaid.

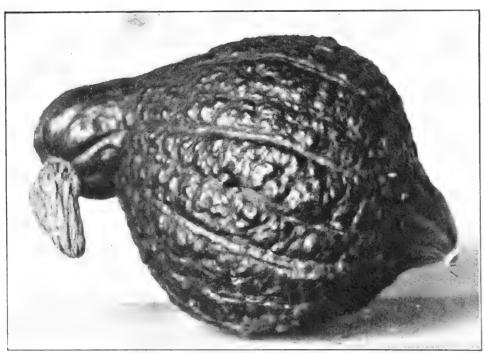
Summer Crookneck 55 days. The largest and one of the earliest summer varieties; fruits often 2 to 2½ feet long; very warty and deep orange in color. Oz., 15c; ¼ lb., 50c; 1 lb., \$1.50, post-paid.

Golden Summer Crookneck 55 days. A standard early and productive summer squash; fruits about a foot long, moderately warted and of bright yellow color. Oz., 15c; 1/4 lb., 50c; 1 lb., \$1.50, postpaid.

Banana 105 days. A prolific, oblong variety 2½ feet in length by 6 inches in diameter, having a greygreen shell. Oz., 15c; ¼ lb., 50c; 1 lb., \$1.50, postpaid. Banana, Pink Similar to the regular Banana, but exterior deep pink. Fruits average 15 inches long and 6½ inches in diameter, straight, pointed at the blossom end, rounded at the stem end. Flesh thick, with small seed cavity. Oz., 15c; ¼ lb., 50c; 1 lb., \$1.50, postpaid.



Yankee Hybrid 50 days. The earliest, most productive summer Squash. Fruits are straight, smooth, attractive and of excellent quality. Very similar to the Early Prolific Straightneck, but this is a true hybrid and better for home and garden use. Oz., 60c; ¼ lb., \$1.70; 1 lb., \$6.50, postpaid.



Improved Hubbard Squash

Mammoth Table Queen 60 days. Similar to the regular Table Queen squash, but larger in size. The quality is unsurpassed and it is a wonderful addition. Much in demand by both home and market gardeners. Oz., 15c; ½ lb., 50c; 1 lb., \$1.50, postpaid.

Table Queen 58 days. A Squash fit for a queen. Cut in half and baked for twenty minutes, it is delicious. Wonderful producer. Fruits are from 6 to 8 inches long and 4 to 6 inches in diameter. Shell hard and smooth, dark green with sometimes a blotch of red at pointed end. Will keep as long as the Hubbard. Oz., 15c; 1/4 lb., 50c; 1 lb., \$1.50, post-paid.

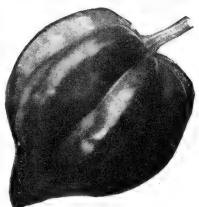


Table Queen Squash

Zucchini 60 days. A well known Italian Marrow type. Fruits nearly cylindrical, straight. Color medium green, mottled with cream-gray and lighter green lace pattern and stripes; flesh firm and of delicate flavor. Suitable for quick freezing. Oz., 20c; ½ lb., 60c; 1 lb., \$2.00, postpaid.

Delicious 103 days. The standard of excellence in winter Squashes. Fruits broad top-shaped, commonly 7 to 8 inches long; skin very dark green, fairly smooth rind, thin but hard; flesh extremely thick, bright yellow, fine grained, dry, without fiber, of highest quality. Oz., 15c; ½ lb., 50c; 1 lb., \$1.50, postpaid.

Golden Delicious 103 days. Valuable for canners because orange color of the exterior. In shape and season practically the same as the original Delicious. Oz., 15c; ½ lb., 50c; 1 lb., \$1.50, postpaid.

Buttercup 100 days. Rind thin and tough, dark green with narrow gray stripes and slight mottling. Orange flesh cooks sweet and dry. A small, thick-fleshed Squash of good storage and eating qualities. Oz., 20c; 1/4 lb., 80c; 1 lb., \$2.50, postpaid.

Butternut 90 days. A recent introduction which has become very popular in the New England states. Fruits 10 to 12 inches long with neck of about 4 inches in diameter which is solid flesh; the seed cavity is located in the lower bowl-shaped end. Skin light creamy brown, flesh yellow, fine grained and of excellent quality. Matures early and is a good keeper. Oz., 20c; 1/4 lb., 80c; 1 lb., \$2.50, postpaid.

Early White Bush Scallop 60 days. Very early summer Squash. Oz., 15c; 1/4 lb., 50c; 1 lb., \$1.50, postpaid.

Early Yellow Bush Scallop 54 days. A true bush but larger than the above. Oz., 15c; 1/4 lb., 50c; 1 lb., \$1.50, postpaid.

The Four Hubbards

Golden Hubbard 100 days. Similar to the Old Hubbard in form and habit, though smaller and decidedly earlier; shell moderately warted, rich orange-red; flesh deep orange, fine quality; good keeper. Oz., 20c; 1/4 lb., 60c; 1 lb., \$2.00, postpaid.

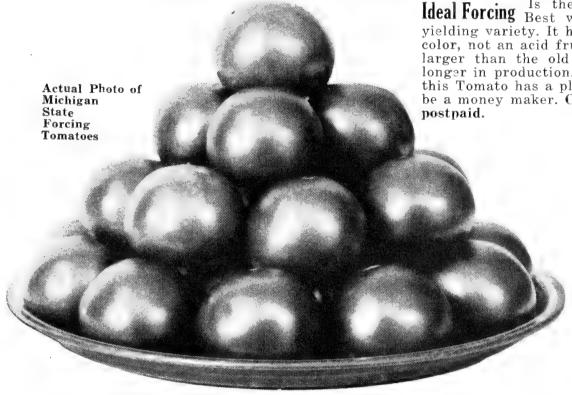
★ Improved Hubbard 105 days. The standard winter Squash. Shell moderately warted; deep dark bronze-green; flesh bright yellow, fine grained, thick and dry. Oz., 15c; ¼ lb., 50c; 1 lb., \$1.50, postpaid.

★ Chicago Warted Hubbard 105 days. quality and form to the Hubbard, but fruit larger and a little later. Oz., 15c; 1/4 lb., 50c; 1 lb., \$1.50, postpaid.

Blue Hubbard 105 days. A new type of Hubbard Squash and said to excel all in the superior quality of its flesh. Similar to the original Hubbard but having a hard blue-gray shell. Oz., 15c; ¼ lb., 50c; 1 lb., \$1.50, postpaid.

FORCING VARIETIES TOMATOES

Grown in Greenhouses Everywhere



Is the result of crossing the Bonny yielding variety. It has no unripe core, is dark red in color, not an acid fruit but of excellent quality. It is larger than the old Grand Rapids Forcing, now no longer in production. It is a splendid shipper. Surely this Tomato has a place in every greenhouse and will be a money maker. Oz., 40c; ½ lb., \$1.50; 1 lb., \$5.00, postpaid.

Michigan State Forcing 75 days. excellent greenhouse variety and a vigorous grower with dark green foliage. Especially attractive medium size fruits (4 to 5 ounces) are borne in clusters of five to eleven. Stem cavity is small, shallow and very smooth. Blossom end well rounded with a very small scar, the outer walls of fruit are thicker, and the firmness of the fruit makes it possible to allow them to ripen on the vine without loss to the grower. Many growers have in late years done remarkably well with this variety for outdoor growing and it is to be recommended. Oz., 50c; 1/4 lb., \$1.75; 1 lb., \$6.00, postpaid.

See page 31 for Spartan Hybrid and Northern Hybrid forcing Tomatoes.

Standard Varieties of TOMATOES

Earliana 64 days. The most productive, first early red Tomato and a profitable sort for the market gardener. Vines are small but vigorous, fruits medium to large in size, exceptionally smooth and solid; color bright deep scarlet. Oz., 60c; ½ lb., \$2.00; 1 lb., \$7.00, postpaid.

Victor "All-America Selections." 65 days. Awarded Bronze Medal. This Tomato is a dwarf self-topping variety. It can be planted close, 5 feet by 3 feet. It sets fruit when other varieties fail. Is extra early, even ripening, with small vines. Color is uniform, scarlet and has a very noted smoothness of skin. A very solid Tomato that does not crack and is a good shipper. Oz., 80c; 1/4 lb., \$2.40; 1 lb., \$8.00, postpaid.

Valiant 67 days. An early market variety. Vines sparse and open. The fruits, weighing about 8 ounces, are smooth, deep and brilliant scarlet in color. Oz., 50c; 1/4 lb., \$1.75; 1 lb., \$6.00, postpaid.

Break o' Day 70 days. The earliest disease-resistant, scarlet-fruited, meaty Tomato yet introduced, 10 to 12 days earlier than Marglobe and very productive. Oz., 60c; ¼ lb., \$2.00; 1 lb., \$7.00, postpaid.

Grothen's Globe 70 days. A much improved type over the Break o' Day, and while disease resistant the vines are heavier foliaged, growing large, upright, early, hardy and prolific. The fruit is bright red, large, globe shaped, firm, smooth and of good quality. Oz., 60c; ¼ lb., \$2.00; 1 lb., \$7.00, postpaid.

Early Baltimore Certified. 70 days. Selection of Marglobe, disease resistant, adapted to all soils. Fruit somewhat smaller, bright red color, and very prolific. Oz., 60c; 1/4 lb., \$2.00; 1 lb., \$7.00, postpaid.

Stokesdale Certified. 70 days. A second-early scarlet fruited variety maturing about a week earlier than Marglobe. Plant rather open in habit with medium heavy foliage. Fruits large, globe or subglobe, smooth and well colored. Oz., 50c; 1/4 lb., \$1.75; 1 lb., \$6.00, postpaid.

Scarlet Dawn 70 days. A leading early variety for garden, shipping and canning. Plant of medium growth, fairly open, very prolific. Fruits medium large with thick wall structure, globular, smooth, free from flat sides, bright scarlet, ripening well to the stem, exceptionally attractive. Adapted to both field and greenhouse production. Oz., 50c; ½ lb., \$1.75; 1 lb., \$6.00, postpaid.

Golden Jubilee 72 days. Short stemmed, sturdy and compact, bearing over a long period. Fruit golden yellow, globular, thick walled, of mild flavor and good quality. Medium size. Oz., 80c; 1/4 lb., \$2.40; 1 lb., \$8.00, postpaid.

Bonny Best Certified. 73 days. Unexcelled as a genuable for forcing under glass as a canning variety in northern sections. Fruits evenly colored bright deep scarlet-red; medium large; flattened globe-shaped; smooth and firm. Oz., 40c; ¼ lb., \$1.50; 1 lb., \$5.00, postpaid.

Chalk's Early Jewel 75 days. An exceptionally fine early variety. About ten days later than the Earliana. Fruit round, smooth and solid. Color crimson. Extremely productive. Oz., 50c; 1/4 lb., \$1.60; 1 lb., \$5.50, postpaid.

Comet 75 days. An excellent climbing variety for greenhouse as well as outdoor growing. Smooth, dark red in color, ripens well throughout. Fruit grows to a good size in heavy clusters and not very acid in quality. A splendid shipper. Oz., 40c; 1/4 lb., \$1.50; 1 lb., \$5.00, postpaid.

★ John Baer Certified. 73 days. An early, productive, red Tomato, on the order of the Chalk's Jewel. Splendid producer. Oz., 40c; ¼ lb., \$1.50; 1 lb., \$5.00, postpaid.

Wisconsin No. 55

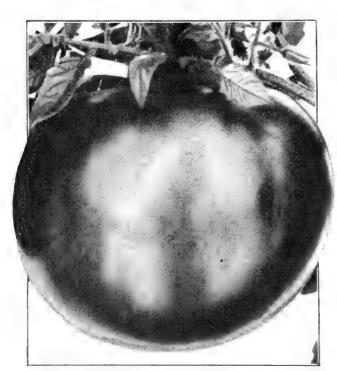
(75 days from transplanting to first picking.) Plant vigorous, quite open, yet sufficiently dense to prevent much sun scalding, with considerable tolerance to blossom end rot, and some tol-

erance to early blight. Fruit set moderately heavy. Fruit scarlet, slightly oblong, larger in size and weight than Stokesdale or John Baer and less liable to cracking. Oz., \$1.00; ½ lb., \$3.50; 1 lb., \$12.00, post-paid.

Dow

DOW SURE SET plant growth control agent for improving the fruit set on field Tomatoes. Last season wonderful results were obtained in

the field trials at Michigan State College. ½ pt. size (m'x with 3 gals. water and spray the blossoms), \$1.75. 4-oz. bottle, 90c.



CERTIFIED Marglobe Tomato



CERTIFIED John Baer Tomato

Pritchard or Scarlet Topper Certified. 75 days. Very productive early sort. The splendid, globe-shaped, smooth fruits grow to a good size and attain an attractive bright red color. Flesh firm, mild flavored, free from acidity, with no core and small seed cavity. Plants grow compact and robust and produce a heavy crop when planted in good rich soil. Oz., 40c; ¼ lb., \$1.50; 1 lb., \$5.00, postpaid.

Marglobe Certified. The Wilt and Nailhead Rust-Resistant Sort. 75 days. Was produced by crossing Livingston's Globe with one or more other varieties. It is avigorous grower whether in greenhouse or field. A bright red in color, of large size, almost round, and very productive. It is very promising. 0z., 40c; ½ lb., \$1.50; 1 lb., \$5.00, postpaid.

Early Detroit or Gulf State Market 77 days. Particularly valuable for shipping. Fruits purplish pink, large and of uniform size. Globe-shaped, smooth and firm. Oz., 60c; 1/4 lb., \$2.00; 1 lb., \$7.00, postpaid.

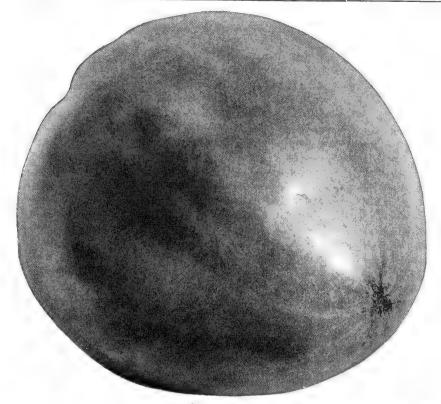
Early Rutgers Certified. 73 days. This is an early strain and has a thick outer and inner wall of solid meat. Globe shaped, scarlet-red in color, resembling Marglobe. The Early Rutgers Tomato is in great demand for all purposes. Oz., 50c; 1/4 lb., \$1.60; 1 lb., \$5.50, postpaid.

Dwarf Stone 81 days. The best of the dwarf Tomatoes. Fruits large, smooth, very solid, of a deep scarlet color. Oz., 60c; 1/4 lb., \$2.00; 1 lb., \$7.00, postpaid.

Greater Baltimore Certified. 83 days. Second early and main crop variety. Deep scarlet-red in color, vigorous and very productive. Preferred by canners on account of its heavy yield. Oz., 50c; ¼ lb., \$1.75; 1 lb., \$6.00, postpaid.

Garden State Certified. 84 days. Developed from crosses involving Pritchard, Marvel and Pink Topper. Plant vigorous, partially resistant to fusarium wilt, and late blight; fruits slightly flattened globe shaped, attractive in color and size. Thick walled and mild flavored. Oz., 80c; 1/1 lb., \$2.40; 1 lb., \$8.00, postpaid.

New Stone 85 days. The standard and general favorite with truckers and canners. Always dependable, very vigorous and productive; fruits round, large, solid, smooth, and deep red in color. Oz., 40c; ¼ lb., \$1.50; 1 lb., \$5.00, postpaid.



Oxheart Tumato

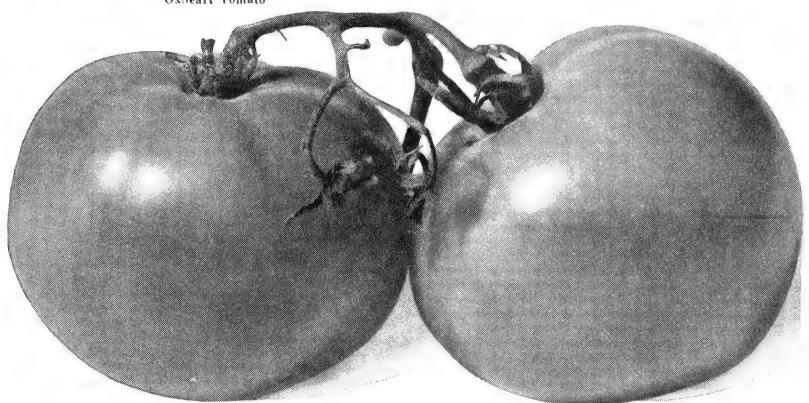
Ponderosa 85 days. A very large, purple-fruited Tomato; solid, with but few seeds, and no acid. Fine for slicing. Oz., 80c; 1/1 lb., \$2.40; 1 lb., \$8.00, postpaid.

Beefsteak (Red Ponderosa.) 90 days. A wilt-resistant, large variety for home and market garden use. Plant is open in habit of growth, heavy. The fruit is large, flat, scarlet, rather smooth. Oz., 80c; 1/4 lb., \$2.40; 1 lb., \$8.00, postpaid.

Oxheart 90 days. An attractive pink-skinned variety. It is exceedingly smooth and tender and almost seedless. It has that delicious mild flavor. Rich soil adds greatly to its productiveness. A late variety. Oz., \$1.00; ½ lb., \$3.50; 1 lb., \$12.00, postpaid.

Small Fruited Tomatoes

Used for pickles, preserves, canning, etc. Easily grown and yield well. Yellow Plum, Red Pear, Yellow Pear and Red Peach. Price of any of the four varieties: ¼ oz., 30c; oz., \$1.00, postpaid. Special: One packet of each of these four varieties for 50c, postpaid.



CERTIFIED Greater Baltimore Tomato

Hybrid Tomatoes For Forcing

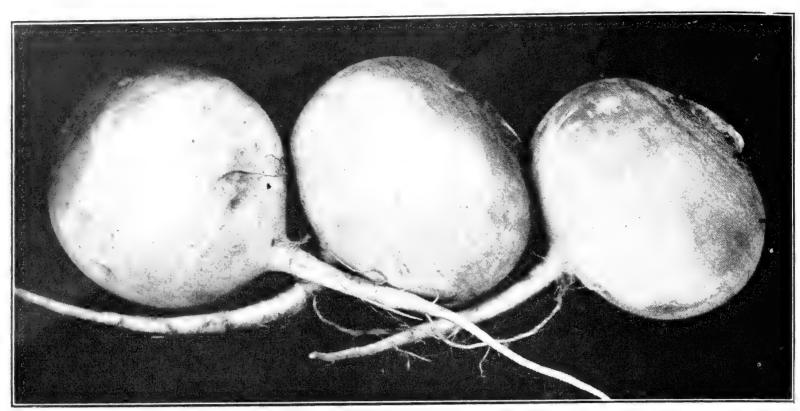
"Just a Little More of Everything"

Two important Hybrid Tomatoes, bred and grown by Mr. Roy H. Burghart, and introduced to the trade as a better and more vigorous Tomato that is more resistant to wilt and disease. They are ideal greenhouse forcing hybrids, and have "just a little more of everything" that is desirable in a Tomato. With increased production at a lower cost, we are able to offer these at lower prices, enabling greater distribution and a better crop at lower cost.

Spartan Hybrid This is a cross between Michigan State Forcing and Cooper's Special, and is an excellent greenhouse hybrid, a week earlier than the parents and about 20 per cent more productive in weight and fruit. Color red, globular shape, medium size fruit, 5 to 6 ounces in weight, about three to the pound; growing in clusters of six to eight. A meaty Tomato, small seed cavity. Vine is more open, giving very uniform ripening of fruit. Being extra vigorous in growth, it is more resistant to both wilt and disease.

Northern Hybrid This is a cross between Michigan State Forcing and Sutton's Best of All, and is an ideal greenhouse hybrid for northern growing, especially in CANADA and northern United States. In productivity it is similar to Spartan Hybrid, but is more vigorous in growing, particularly in dark fall and winter weather which is prevalent in the North. Vine is open, permitting uniform ripening. Fruit is red in color, globular in shape, but is smaller, 4 to 5 ounces of solid fruit in clusters of ten to twelve. More resistant to wilt and disease on account of its vigorous growth.

Both of these hybrids are put up in sealed packets, 50 seeds, \$1.00; 100 seeds, \$1.50; 250 seeds, \$2.50; 500 seeds, \$4.00; 1000 seeds, \$7.50; $\frac{1}{4}$ oz., \$13.00; $\frac{1}{2}$ oz., \$25.00, postpaid.



Purple Top White Globe Turnip

Turnips

CULTURAL DIRECTIONS. One ounce to 150 feet of drill; one pound per acre. For main crop, sow in July or August. Sow either broadcast or in drills.

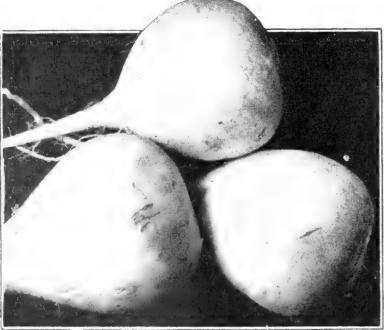
★ Purple Top White Globe 55 days. Not so early as White Egg, perfect globe in shape. Flesh and skin white, colored purple or red above ground. Very fine grained and sweet. The most attractive Turnip and best seller. Oz., 10c; 1/4 lb., 25c; 1 lb., 75c, postpaid.

Extra Early White Milan 40 days. The earliest bulbs, small, clear white, and flat. One of the best for early bunching. Oz., 10c; ¼ lb., 25c; 1 lb., 75c, postpaid.

Purple Top Strap Leaved 45 days. A very early, flat variety, medium size; purple or red above ground and white below. Oz., 10c; 1/4 lb., 25c; 1 lb., 75c, postpaid.

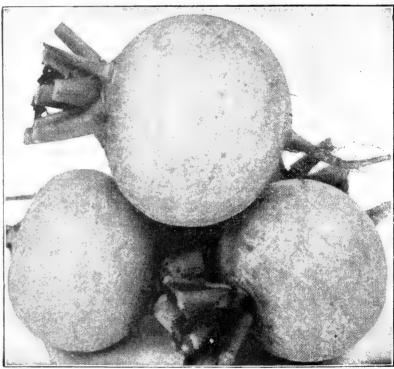
Golden Ball 65 days. Tops small, roots medium size, round, smooth and deep yellow. Fine grained, flesh firm, crisp and sweet. Oz., 10c; 1/4 lb., 25c; 1 lb., 75c, postpaid.

Recommended by Michigan State College



White Egg Turnip

White Egg 55 days. An early egg-shaped variety. Roots smooth, clear white. One of the best for market. Oz., 10c; ¼ lb., 25c; 1 lb., 75c, postpaid.



Yellow Globe Turnip

Yellow Globe 75 days. A round, smooth, light yellow ity. Oz., 10c; ¼ lb., 25c; 1 lb., 75c, postpaid.

Cow Horn 65 days. Roots long, slightly crooked; clear white. Often sown to plow under for fertilizer. Oz., 10c; ¼ lb., 30c; 1 lb., 90c, postpaid.

Yellow Aberdeen 75 days. A late, medium sized, long keeping variety, roots round, yellow with a purple top, flesh tender. Oz., 10c; ¼ lb., 25c; 1 lb., 75c, postpaid

25c; 1 lb., 75c, postpaid.

Seven Top 45 days. For turnip greens. Extremely use. Crown sends up numerous shoots which are excellent for greens. Oz., 10c; ¼ lb., 25c; 1 lb., 75c, postpaid.

SEED TREATMENT PAYS

Treat your seeds with Semesan disinfectants and assure yourself of a crop.

Seed treatment pays no matter what kind of seed is treated. We handle a complete line.

Making a Lawn and Its Care



Preparing the Soil

The most desirable soils for the lawn are the "loams", but if the soil available for the building of a lawn is a tight clay, sand should be added, or if a sandy soil, humus is needed, which would make it as nearly a loam as possible.

Even such simple tasks as spading are important and should be done with care. The depth of the surface soil largely determines the depth to which one should spade. If the top soil is six inches or less in thickness, work it to the depth of the surface soil. Never turn up the subsoil.

To get the best results from spading, each shovelful of soil is turned over and placed upon the edge of the hole away from the spader. It is then pulverized with a tap of the spade. This not only breaks up the mass, but carries the granulated soil back into the hole from which it was originally taken.

After the spaded soil has been well pulverized, grade the soil to slope gently from the house. The grading will prevent water from standing around the foundation of the house. Next, level and roll until the seedbed is firm.

Applying Plant Food

When the seedbed has been completed, Vigoro, the complete balanced plant food, or Milorganite should be applied. The lawn is never so effectively fed as before the grass seed is sown. The plant food should be applied and spread evenly over the surface of the soil at the rate of 4 pounds per hundred square feet, and worked into the top few inches.

Sowing Seed

After the plant food has been worked into the soil, the seed should be spread uniformly over the surface at the rate of 4 or 5 pounds per one thousand square feet of soil. The seeding should be done by going in both directions to get an even distribution, both at the ends as well as the center of the throw.

A covering of clean straw or coarse cheesecloth on the steep slopes will help to prevent washing which may occur before the grass becomes established.

Feeding

About 8 or 10 weeks after the lawn is seeded the young grass should again be fed either Vigoro, the complete balanced plant food, or Milorganite. The application is made at the rate of 2 pounds per hundred square feet of lawn.

The plant food should be applied when the grass is dry and then brushed from the grass with a broom or the back of a rake and the lawn should immediately be given a thorough soaking to wash the fertilizer from the grass and carry it into the soil. If the plant food is allowed to remain on the grass and moisture should reach it the result would be a burning of the tender leaves. To prevent this, a thorough watering is very essential.

Well-fed grass withstands the inroads of weeds and also resists injury from the attack of certain diseases, and by regular feeding with an application of Vigoro or Milorganite will reduce the amount of reseeding necessary. The greater development of the root system and the ability to store up reserves of food material, make well-fed grass able to withstand the extremes of either winter or summer weather and to maintain a dense turf year after year.

Special care must be given the lawn throughout the hot summer months, as Kentucky Blue grass needs a resting period in mid-summer, and Red Top will grow most anywhere and has its resting period in the fall after the Kentucky Blue Grass has recovered. If excellent growth and vigor have been maintained during the spring, the lawn can be kept in a green vigorous condition during the summer, by careful watering, feeding and clipping.

At the approach of fall, lawns should again have a thorough application of either Vigoro or Milorganite, applied at the rate of 4 lbs. per hundred square feet, and the lawn should be thoroughly soaked, following the application, as stated above.

Care of the Lawn

Young grass should be allowed to grow three inches high before the first cutting, but on established lawns the grass should be cut quite short until the middle of May. Fertilize it well and try to get a complete ground cover, and after this has been accomplished, keep it cut as long as possible. Lower the wooden roller on your mower or better still, alter it or secure one that will cut three inches high. Plenty of leaf growth will shade the grass roots in hot weather and best of all, provide a laborless way of preventing weeds and crab grass from seeding, as weeds will not grow in a thick shady stand of grass and crab grass will not germinate even in semi-shade.

Whenever you are applying water to an established lawn be liberal with the amount used, as the water should penetrate 4 inches to do any good, and light sprinklings do injury—not good; they are about the worst treatment you can give your lawn.

It is best to water only once a week on clay soil, but it should be applied so that the water is quickly absorbed into the soil. Sandy soils dry out more quickly, and lighter and more frequent waterings are necessary.

Grade "A" Sunny Lawn Mixture

This is our own mixture, containing Kentucky Blue Grass, Fancy Red Top, Red Creeping Fescue, Chewings Fescue, Rye Grass, and 10% pure White Clover. Wonderful results are and have been obtained with this mixture. We use only the very best of seeds obtainable, of lasting value and hardiness, giving you a beautiful and permanent lawn that will last for years.

Grade "A" Shady Lawn Mixture

Contains Chewings Fescue, Poa Trivialis, Kentucky Blue Grass and Red Top. This mixture is our own, being mixed by ourselves especially for shady spots. We use only the very best seeds obtainable and as more care and attention is required we have used the hardier grasses, that will make a dense, thick growth in light soils and a satisfactory lawn in shady places or where sun is available only part of the time.

Inasmuch as we mix our own grass mixtures we have the individual grasses for those who want straight grasses in one spot or another.

Kentucky Blue Grass, June Grass One of the best nency. For lawns or pasture, it has no superior. Does well in any soil and stands the summer heat remarkably well. As it takes some time to become established, it is usually sown in mixtures.

Red Top A very hardy perennial grass, succeeding best on moist land. Valuable for lawn or pasture, and will produce large crops of good hay.

Domestic Rye An annual, coarser than blue grass, used extensively on banks and terraces.

English or Perennial Rye Grass A lawn grass where quick results are wanted.

White Clover (Dutch). A small, low growing variety. It is largely used in lawns and pastures. It makes a small, close, compact growth covering the ground like a carpet. Its blossoms are round, white and sweet scented, with leaves of bright green color.

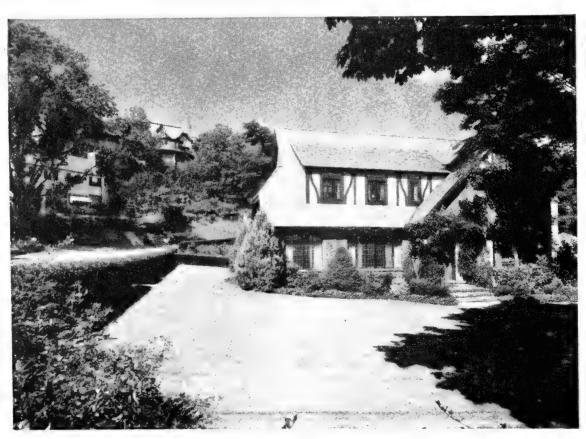
Poa Trivialis (Rough Stalked Meadow Grass). Closely related to Kentucky Blue Grass. Mostly used in shady places but will thrive in any soil.

Chewings Fescue Valuable on sandy soils and in the shade. It is a perennial grass with a fine blade and spreading root system.

Red Creeping Fescue One of the best Fescues obtainmaking a dense turf which tends to crowd out weeds. Does well in shade and is good on sanly soil.

Bent Grass One of the most valuable lawn grasses. Exceptionally good for golf courses, greens, etc., because of its short growth and deep green, fine-leaved foliage. Requires very rich soil and plenty of moisture.

Mail Orders are Solicited and Prices Will be Quoted on Request.



ANNUAL FLOWERS

That Should Be In Everyone's Garden





Always in demand and not hard to grow, being hardy and free flowering. It is one of the most valuable of summer flowers.

MARGUERITE, DOUBLE MIXED. 4 ozs., \$7.50; oz., \$2.00; 1/4 oz., 65c; pkt., 10c.

CHABAUD GIANT MIXED. 4 ozs., \$11.00; 1 oz., \$3.00; 1/4 oz., 85c; pkt., 10c.



A very popular annual that will always charm by its simple beauty. See page 40.

CYANUS MIXED. 4 ozs., \$1.50; oz., 55c; 1/4 oz., 15c; pkt. 10c.

JUBILEE GEM. Pkts. only, 10c.

RED BOY. Pkts. only, 10c.

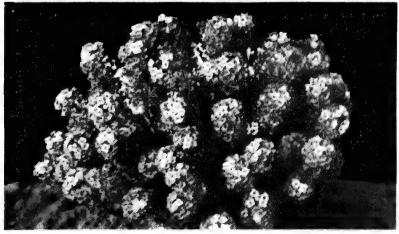
ALYSSUM

ALYSSUM. Sweet Alyssum. Very popular border flower. Dwarf habit, blooming until killed by frost. Fine for beds, borders and vases.

LITTLE GEM. Erect white. 4 ozs., \$3.50; 1 oz., \$1.00; 1/4 oz., 30c; pkt., 10c.

VIOLET QUEEN. Pictured below. Oz., \$1.15; 1/4 oz., 35c; pkt., 10c.

CARPET OF SNOW. 4 ozs., \$3.50; 1 oz., \$1.00; $\frac{1}{4}$ oz., 30c; pkt., 10c. See page 39.



Violet Queen

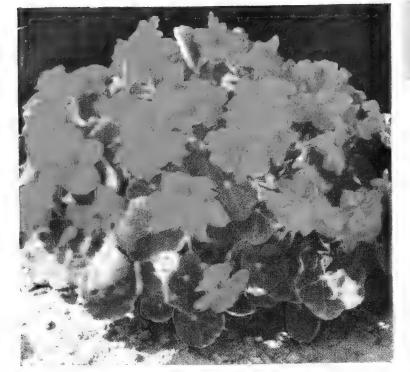


COSMOS

Plants of graceful beauty, fine feathery foliage and large flowers. While the early varieties begin blooming in July, the Cosmos reaches the height of its beauty in autumn.

EARLY FLOWERING MAMMOTH MIXED. 4 ozs., \$1.60; oz., 50c; pkt., 10c.

KLONDYKE, ORANGE FLARE. Oz., 75c; 1/4 oz., 25c; pkt., 10c. See complete listing on page 43.



Tropaelum—Nasturtiums

NASTURTIUMS

For ease of culture, duration of bloom, brilliancy of colcring and general excellence, nothing excels them. All they need is moderately good soil, in a well-drained, sunny position, and within a few weeks from the time they are sown until hard frost comes there is an endless profusion of blooms. See page 48.

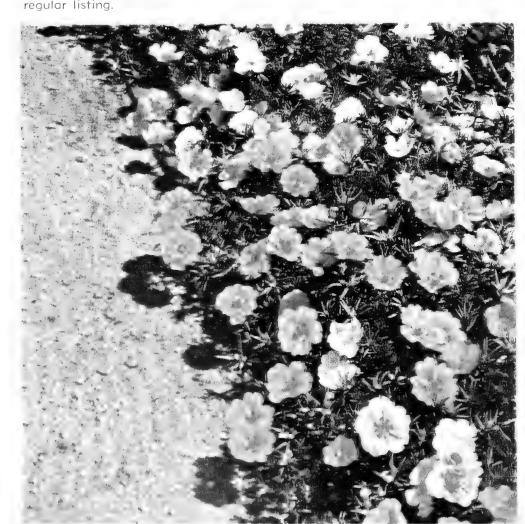
DWARF MIXED. 4 ozs., 75c; 1 oz., 20c; pkt., 10c, postpaid. TALL MIXED. 4 ozs., 75c; 1 oz., 20c; pkt., 10c, postpaid.

PORTULACA

(Rose Moss)

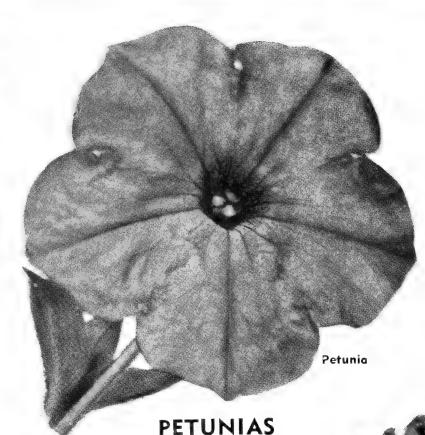
As pictured below, this is one of the most beautiful scenes in any garden. It will grow and bloom profusely in dry, hot situations, where almost any other plant would soon die. Easily transplanted. In sowing mix the seed with dry sand to insure an even distribution. Sow in May when the ground is thoroughly warmed, and very soon the loveliest of floral carpets will appear.

DOUBLE BEST MIXED. Oz., \$2.75; $\frac{1}{4}$ oz., 80c; pkt., 10c. SINGLE MIXED. Oz., \$1.75; $\frac{1}{4}$ oz., 50c; pkt., 10c. See page 50 in the



Portulaca

Garden Beauties



In dry seasons or wet, the Petunia is the most adaptable, long flowering and colorful of the garden annuals. Petunias love a rich soil, and thrive best in a sunny location. Pinch back freely. This causes the plants to branch out and spread, shading the ground, thereby helping to conserve the moisture. Keep the faded flowers clipped.

DWARF CALIFORNIA GI-ANTS. Mixed. Extra choice blend. The habit of the plant is very dwarf, flowers very large and of the finest substance. All with openveined throats of the Superbisima type. 1/4 oz., \$15.00; 1/8 oz., \$8.00; 1/16 oz., \$4.50; pkt., 50c, postpaid.

GIANTS OF CALIFORNIA. Mixed. A well-balanced mixture containing a remarkably fine variety of colors, in blends of crimson, white, violet, lavender and pink. Large flowers freely produced. 1/4 oz., \$12.50; 1/8 oz., \$7.00; 1/16 oz., \$4.00; pkt., 25c, postpaid. Refer to page 48.



Aster

A Thing

Beauly

foreve

SPRY MARIGOLD

This is a miniature version of Harmony. Growing in compact, 9-inch bushes, producing freely, flowers less than half the size of the popular variety "Harmony." It is uniform and fine for ribbon planting. 4 ozs., \$5.50; oz., \$1.60; 1/4 oz., 50c; pkt., 10c.

Other Marigolds are listed on page 47.



Spry Marigold

S Anyone Can Grow

Thing Mauty rever





(Ipomoea)

Deservedly very popular as they are one of the most free flowering and rapid growing plants in cultivation; the beauty and delicacy of their brilliant flowers are unsurpassed. Soaking the seed in warm water for an hour or two hastens ger-

HEAVENLY BLUE. The color is a deep sky-blue shading lighter toward the center; the flowers are large and freely produced and the plants flower early and continue throughout the summer. Flowers will remain open to 6 o'clock in the evening on cloudy days. **Oz.**, **60c**; **pkt.**, **10c**. See page 47 for all other Morning Glories.



Scabiosa

SCABIOSA

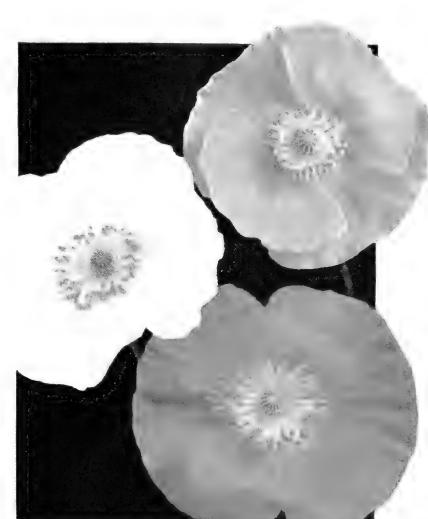
(Mourning Bride)

GRANDIFLORA MIXED. Our latest special mixture and we are sure the delicate soft colors will be admired by all our friends. See page 51. 4 ozs., \$3.00; oz., 90c; 1/4 oz., 35c;



GIANT CREGO. The flowers are of immense size, usually measuring from 4 to 5 inches in diameter, and borne on stems 12 inches or more in length. Mixed, all colors: 4 ozs., \$5.00; 1 oz., \$1.45; ½ oz., 45c; pkt., 10c.

HEARTS OF FRANCE. As illustrated. A dark ruby-red variety; large double flowers. 4 czs., \$6.50; 1 oz., \$1.85; ½ oz., 60c; pkt., 10c.
All other Asters are listed on page 40 in our catalog.

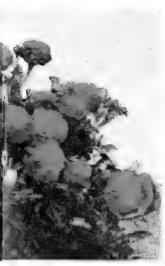


POPPIES

Should be sown as early in the spring cs possible, where they are to remain, as they will not stand transplanting. Sow very thinly; they must not stand nearer than 5 or 6 inches apart if you wish best results.

SHIRLEY, SINGLE. Lovely and dainty shades, many edged and shaded with other colors. See page 50. Oz., 60c; 1/4 oz., 20c; pkt., 10c, post-

SHIRLEY, DOUBLE. Beautiful double satiny flowers in shades of white, pink, and old rose with white centers. Oz., 80c; 1/4 oz., 25c; pkt., 10c.



origold

Asters



ANNUAL FLOWERS

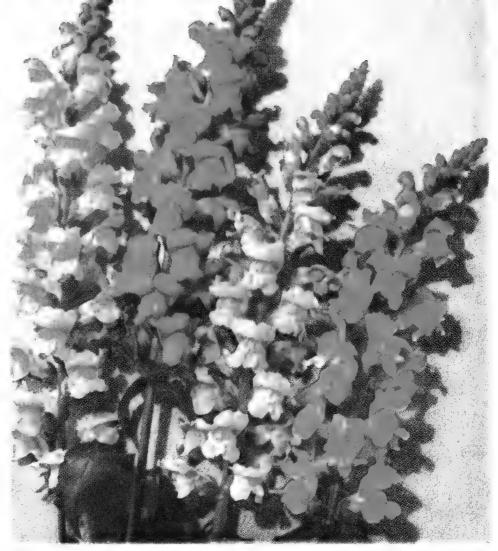
That Should be in Everyone's Garden

ZINNIAS

GIANT DAHLIA FLOWERED. In formation the broad petals are closely imbricated, some-times seeming almost to be piled one upon the other. The flowers often measure four inches in depth and six to eight inches in diameter. In general appearance the flowers compare with the Show Dahlias. Mixed colors: 1 lb., \$10.00; 4 ozs., \$2.75; oz., 80c; pkt., 10c.

Many other Zinnias are listed on page 54.





Rust-Proof Snapdragons

VERBENA

One of our trustworthy garden companions. Of trailing habit. The foliage makes a perfect carpet and a fine background for the broad, flat flower heads of many brilliant colors. Sow in boxes in the house and transplant when seedlings are an inch high, and set outside after danger of frost is past, in a warm, sunny spot.

MAMMOTH MIXED. Producing in handsome umbels, flowers of large size in beautiful shades of white, rose, scarlet, blue and purple. 4 ozs., \$6.50; oz., \$1.90; ½ oz., 60c; pkt., 10c, postpaid. See page 54.

RUST-PROOF SNAPDRAGON

(ANTIRRHINUM)

For gorgeous coloring few tlowers can match Snapdragons. The flowers are of very large size, very fragrant, and are produced in immense, long spikes, which render them well adapted for cut flowers. See page 51.

DWARF MIXED. 4 ozs., \$10.00; 1 oz., \$2.50; 1/4 oz., 70c; pkt. 10c. TALL MIXED. 4 ozs., \$9.00; 1 oz., \$2.00; 1/4 cz., 60c; pkt., 10c.

PANSIES

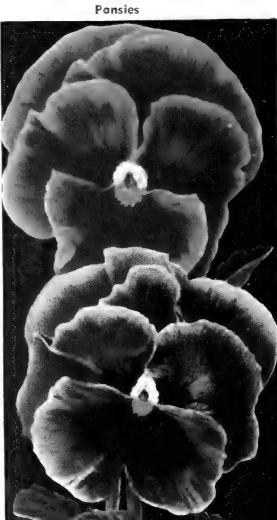
They like a cool, moist winds as well as the noon-day sun. Seed should be sown in the house and transplanted when danger of frost is over. For large flowers, early in the spring, the seed should be sown in August or September and the plants protected with a cold frame during the winter. May also be sown out-of-doors in the spring for late summer and fall

GIANT MIXTURE, DONO-VAN STRAIN. Flowers GIANT MIXTURE, DONU-VAN STRAIN. Flowers very large, and great di-versity of colors. This mixture contains all the good ones. See page 50. 4 ozs., \$28.00; oz., \$9.00; 1/4 oz., \$2.50; pkt., 10c, postpaid.

Zinnias

Pansies are Listed on Page 50.





FLOWER SEED DEPARTMENT

We are convinced that many of the failures with flower seeds are due to lack of proper conditions, and while it would be impossible in the space at our disposal in this catalog to give explicit directions for each and every variety which we offer, we feel sure that if the general directions given below are followed, success will be the rule.

All of our flower seeds are listed by their common name in strict alphabetical order, together with the botanical name for your guidance.

Success With Flower Seeds

For all flower seeds which should be started indoors, the For all flower seeds which should be started indoors, the best plan is to sow in earthenware seed pans or boxes (about 2 inches deep) which should be filled to the depth of an inch with any rough material that will furnish perfect drainage. The upper inch should be nicely sifted soil, composed, if possible, of about one-third each of sand, leaf mould and light garden loam. Press firmly and evenly and water thoroughly the day before sowing. Sow the seeds thinly over the surface, cover about one-eighth of an inch and press firmly. When the seedlings are large enough to handle, they should be transplanted into similarly prepared boxes an inch apart each way, or put into small pots and kept in same until time to plant out in the open ground. At all times they should have an abundance of air, otherwise the young seedlings are liable to "damp off."

For most of the ordinary annual flowers, the simplest method is to sow directly out-of-doors when danger of frost is past in the space where they are intended to flowfrost is past in the space where they are intended to now-er. The ground should be dug and raked fine on the sur-face, sowing the seeds evenly and thinly, covering not over four times their size, and firming the soil over them. Should they come up too thickly, as most of them are likely to do, thin out so that the plants will stand from 4 to 12 inches apart, according to the variety.

How to Sow Flower Seeds

It will prove quite an advantage to mix all small seeds with sand or dry soil and scatter broadcast. This separates the seeds and is quite an advantage in thinning out or transplanting the young plants as those that remain are und sturbed. A common mistake in sowing flower seeds is covering too deeply. The exception to this is the Sweet Pea, which is seldom planted deep enough. As a general rule, cover small seeds only to the depth of the thickness of the seeds; always press the earth after sowing all flower seeds, else there is danger of their drying up before the roots can get firm hold of the soil. Seed of the hardier annuals may be sown where they are to grow; but as a rule, it is preferable to transplant, as the plants are generally stronger and stand the drought better. During very dry weather, and when the seedlings are first set out, they should be watered frequently.

The weeds should be kept down and the ground loosened

The weeds should be kept down and the ground loosened often, so that the plants will receive the full benefit of the rains and dews, which they will not if the ground is allowed to become hard and baked.

Annuals are those flowers which bloom and die the same year; grown from seed exclusively.

Biennials bloom and die the second year from the seeding time.

Perennials grow the plant the first year but do not flower until the second year and then bloom every year.



Sweet Alvssum

ABRONIA (Sand Verbena). Pkt., 10c.

Alyssum (SWEET ALYSSUM) (A)

(60.000 seeds per oz.)

Very popular border flower. Dwarf habit, blooming until killed by frost. Fine for beds, borders and vases.

Little Gem. Erect; white. 4 ozs., \$3.50; 1 oz., \$1.00; 1/4 oz., 30c; pkt., 10c.

Violet Queen. Oz., \$1.15; ½ oz., 35c; pkt., 16c.

Carpet of Snow. 4 ozs., \$3.50; 1 oz., \$1.60; $\frac{1}{1}$ oz., 30c; pkt.,

Alyssum (P)

Saxatile compactum (Basket of Gold). 9 inches high. Blooms in May and June. producing masses of golden flowers very early. 1 oz., \$1.00; \(\frac{1}{4} \) oz., 30c; pkt., 10c.

Ageratum (FLOSSFLOWER) (A)

(214,000 seeds per oz.)
One of the best summer blooming plants. They are rapid growers; early and constant bloomers.

Mexicanum Tall. 18 inches. Beautiful, soft lavender-blue, of free branching habit. 1/4 oz., 40c; pkt., 10c.

Blue Cap. Selected. 6 inches. Definitely more dwarf, more compact in habit with small leaves. Bright, deep, rich lavender-blue. 1 oz., \$4.00; ¼ oz., \$1.25; pkt., 10c.

Blue Perfection, Pkt., 10c.

Midget Blue. Dwarf, compact, rich blue. 1 oz., \$5.00; 1/4 oz., \$1.50; pkt., 10c.

NUMBER OF SEEDS PER OUNCE, UNDER ALL FLOWER ITEMS ARE APPROXIMATE

ARCTOTIS, Grandis. Pkt., 10c. ANCHUSA ITALICA, Dropmore. Pkt., 10c. ARABIS, Alpina. Pkt., 10c. ARMERIA, Maritima. Pkt., 10c.

Wilt-Resistant Asters (A)

(12,000 seeds per oz.)

Giant Crego. The flowers are of immense size, usually from 4 to 5 inches in diameter, and borne on stems 12 inches or more in length. Mixed, all colors. 4 ozs., \$5.00; 1 oz., \$1.45; ½ oz., 45c; pkt., 10c.

Queen of the Market. Best early Aster, usually in full bloom two weeks before most others begin to blossom. Graceful spreading habit. Mixed, all colors. 4 ozs., \$5.25; 1 oz., \$1.50; ½ oz., 40c; pkt., 10c.

American Beauty. Late flowering. Mixed colors. 4

ozs., \$6.50; 1 oz., \$1.85; ¼ oz., 60c; pkt., 10c.

Heart of France. Dark ruby-red variety; large double flowers, beautiful type. Most outstanding Aster. 4 ozs., \$6.50; 1 oz., \$1.85; ¼ oz., 60c; pkt., 10c.

Giant California Sunshine. The flowers are large, with

loosely placed outer petals contrasting with the creamy yellow or blue centers, giving a lazy effect which is quite delightful. The rogues and off types bloom first and the Giant Sunshine later. Mixed colors; ¼ oz., 95c; pkt., 10c.

Giant Branching. Mixed colors. 4 ozs., \$5.25; 1 oz., \$1.50; 1/4 oz., 40c; pkt., 10c.

Double American Branching, Mixed. Pkt., 10c. ACROCLINIUM, Double Mixed. Pkt., 10c.



Calendula

Baby's Breath (GYPSOPHILA) (A)

(25,000 seeds per oz.) Graceful plants of fairy-like growth. Large flowering, pure white, of free, easy growth. Much in demand for cutting and combining with other flowers for bouquets and vases. Several sowings should be made during the season to keep up the supply. 4 ozs., \$1.00; 1 oz., 35c; pkt., 10c.

GYPSOPHILA (P) Paniculata. Double white. ¼ oz., \$1.00; pkt., 10c.

Bachelor's Button

(8,000 seeds per oz.)

A very popular annual that will always charm by its simple beauty.

Cyanus Mixed. 4 ozs., \$1.50; 1 oz., 55c; 1/4 oz., 15c; pkt., 10c.

Jubilee Gem. Pkt., 10c. Red Boy. Pkt., 10c.



Giant California Sunshine Aster

Balsam (LADY SLIPPER) (A)

(2,400 seeds per oz.)

Double Camellia-Flowered Mixed. An old and favorite garden flower, producing its gorgeous masses of beautiful, colored, double flowers in the greatest profusion. 1½ to 2 feet. 4 ozs., \$3.25; 1 oz., 90c; in the greatest ¹/₄ oz., 30c; pkt., 10c. Bush Mixed. 4 ozs., \$8.50; 1 oz., \$2.50; ¹/₄ oz., 80c;

pkt., 10c.

BLUE LACE FLOWER. Coeruleus. Blue. Pkt., 10c.

Calendula (POT MARIGOLD) (A)

(4,000 seeds per oz.)

range King. The outer petals are slightly imbricated, while those in the center are curved like Orange King.

those of the Peony. Color glowing orange. 4 ozs., \$2.40; 1 oz., 75c; ½ oz., 25c; pkt., 10c.

The Ball. It has fine stems, immense double flower of a brilliant glisteny orange. A great favorite on the Chicago cut flower market. 4 ozs., \$3.75; 1 oz., \$1.00; ½ oz., 25a; pkt. 10c. \$1.00; ¼ oz., 35c; pkt., 10c. Sunshine. Pkt., 10c.

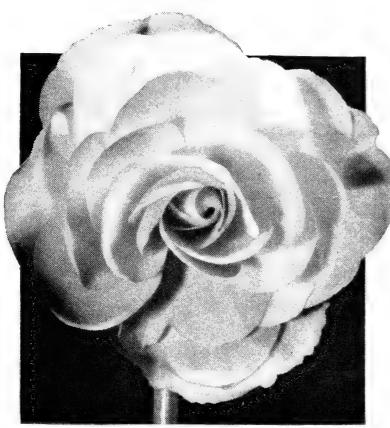
California Poppy (ESCHSCHOLTZIA) (A)

(15,000 seeds per oz.)

Especially valuable for growing in flower beds and masses. Sow where plants are to bloom. Bright showy flowers and feathered foliage. Good for cut flowers. California Mixed. Large flowers. Oz., 50c: pkt., 10c. California Golden. Oz., 50c; pkt., 10c.



California Poppies

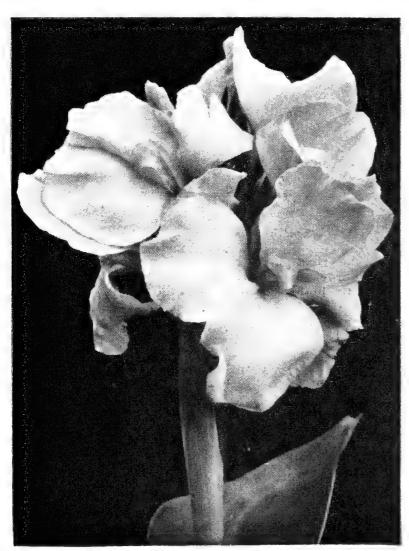


Tuberous-Rooted Begonia

Tuberoses, Double

(Polianthes Tuberosa)

Excelsior Dwarf Pearl, Double. Easily recognized by its exquisite fragrance and beautiful flower spike; long stems, making it an ideal cut flower. Top size. 20c each; \$2.00 per doz., postpaid.



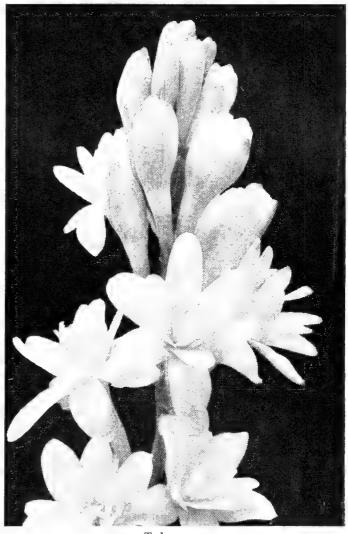
Cannas

Begonias

Tuberous-Rooted

Unexcelled for summer bedding.

Camellia Flowered, Double. Red, yellow, orange, pink and white. Size 1½ inch and up. 25c each; \$2.75 per dozen, postpaid.



Tuberoses

Cannas

These new varieties with large flowers are unequalled for creating a colorful show from July till frost. They do best in full sun and respond quickly to feeding.

Hungaria. 3½ ft. Best pink Canna. Leaves bluish green, never burn. Flowers are large with big petals.

King Humbert. 4 ft. Scarlet flowers; bronze leaves. A "Gold Medal" sensation.

The President. 4 ft. A rich, glowing scarlet on strong stalks; green foliage.

Yellow King Humbert. 4 ft. Foliage a very dark green; flowers deep rich yellow, softly spotted and blotched with bright red.

Prices on Any of the Above: 15c each; \$1.75 per doz., postpaid.



Canterbury Bells

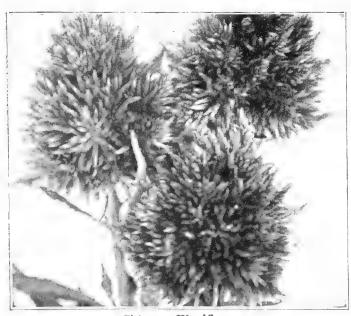
Canterbury Bells (CAMPANULA) (B)

(125,000 seeds per oz.)

This old-fashioned flower is a favorite with all, stately and showy and of the easiest growth. For best results seed should be sown every year.

Double Mixed. Oz., \$1.40; ½ oz., 40c; pkt., 10c.

Calycanthema (Cup and Saucer). 2 ft. June to August. Mixed colors. Oz., \$1.60; ½ oz., 50c; pkt., 10c.



Chinese Woolflower

Calliopsis (TICKSEED) (A)

(100,000 seeds per oz.)

Very graceful border plants, supplying throughout Summer an abundance of elegant, showy flowers which are greatly prized for bouquets and vases. Will thrive anywhere. 6 in. to 2 ft. Double mixed, all colors of the state of the colors. 4 ozs., \$1.60; 1 oz., 50c; pkt., 10c.

Candytuft (A)

(10,000 seeds per oz.)

This is one of the most prized garden annuals. Easily grown from seed and does not need transplanting. Fine for cut flowers. Mixed. 4 ozs., \$1.70; 1 oz., 50c; ¼ oz., 20c; pkt., 10c.

Giant Hyacinth Flowered, White. Pkt., 10c. CARDINAL CLIMBER (A). Pkt., 10c.

Carnations (A)

(15,000 seeds per oz.)

Always in demand and not hard to grow, being hardy and free flowering. It is one of the most valuable of summer flowers.

Marguerite. Double Mixed. 4 ozs., \$7.50; oz., \$2.00; $\frac{1}{4}$ oz., 65c; pkt., 10c.

Chabaud Giant Mixed. 4 ozs., \$11.00; 1 oz., \$3.00; 1/4 oz., 85c; pkt., 10c.



Centaurea

Castor Bean (RICINUS) (A)

(30 seeds per oz.)

Decorative plant with fern-like foliage, giving to the garden a magnificent sub-tropical effect; even a single plant forms a pyramid of leaves.

Zanzibariensis. Leaves vary in color from light green to purplish red. 1/4 lb., 75c; oz., 25c; pkt., 10c.

Celosia (COXCOMB) (A)

(30,000 seeds per oz.)

Very popular annuals of easy culture, producing rge, ornamental, comb-like heads like ruffled chenille. Prized for pots or summer flower beds.

Tall Cockscomb, Mixed. 18 to 24 inches. Packets only. Pkt., 10c.

Chinese Woolflower (Celosia Childsi). Plants grow 2 to 3 ft. high, the bloom starting early with a central head, round and globular, which often reaches the immense size of 2 ft. in circumference. Scores of branches are thrown out, each bearing a ball of scarlet wool. Pkt., 10c.

Plumosa, Dwarf Fiery Feathered. Pkt., 10c. Feathered, Mixed. Pkt., 10c.

CHINESE FORGET-ME-NOT. Firmament. Pkt., 10c.

CLARKIA, Double Mixed. Pkt., 10c.

CLEOME, Giant Rose Shades. Pkt., 10c.

Coleus (A)

(FOLIAGE PLANTS) (3,500 seeds per 1/32 oz.)

Bedding plants, growing about 1 foot high. Their foliage is highly ornamental. Easy to raise from seed. Sow seed indoors. Extra large. Choice Mixed. 1/16 oz., \$3.25; ½ oz., \$6.25; pkt., 25c.

Columbine (P)

(AQUILEGIA) (17,500 seeds per oz.)

This beautiful plant thrives in all kinds of soil; graceful foliage, flowers abundantly from early May until the last of June. Mrs. Scott Elliott's Strain, 1/4 oz., \$1.50; pkt., 10c.



Columbine-Aquilegia

Cosmos (A)

(5,500 seeds per oz.)

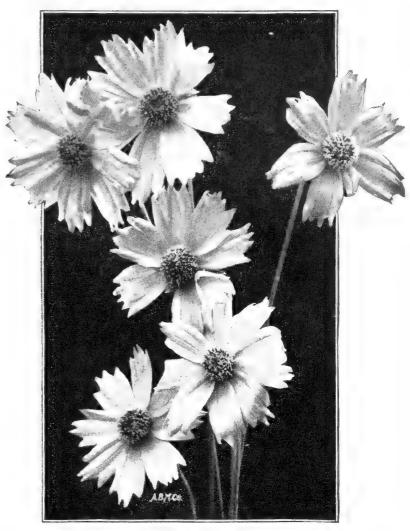
Klondyke, Orange Flare. Orange Flare will flower in the North in less than four months from seed and continue to grow and bloom with increasing freedom until killed by frost. As it is a tropical plant it should not be sown out-of-doors until the ground is warm. Give it a full sun in the garden. Cut flowers should be taken when newly opened with low centers when they will keep several days in water. ½ oz., 25c; 1 oz., 75c; pkt., 10c.

Early Flowering Mammoth, Mixed. 4 ozs., \$1.60; oz., 50c; pkt., 10c.

Giant Mixed. 4 ozs., \$1.35; oz., 40c; pkt., 10c.

Sensation, Mixed. 4 ozs., \$2.00; 1 oz., 50c; pkt., 10c.

Early Double Crested, Mixed. Pkt., 25c.



Coreopsis

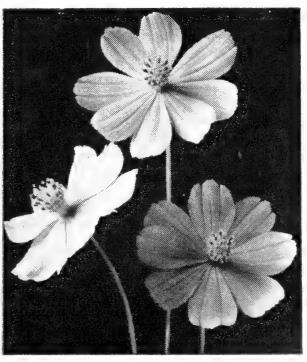
Coreopsis (P)

(12,000 seeds per oz.)

This is one of the finest of hardy plants, with large, showy, bright yellow flowers produced in the greatest abundance from June until frost. As cut flowers they stand near the head among hardy plants. Oz., 60c; ½ oz., 20c; pkt., 10c.

Cypress Vine (A)

For trailing upon a light ornamental trellis the Cypress Vine cannot be excelled. It has a profusion of scarlet or white star-shaped blossoms, and finely cut foliage. Mixed. Pkt., 10c.



Cosmos, Klondyke Orange Flare



Morocco

GLADIOLUS

All large size bulbs, treated and free from disease.

60c per doz.; \$4.25 per 100.

BAGDAD. Decorative. Large flowers and tall. A smoky old rose. BIT O' HEAVEN. Exhibition. Flaming orange with yellow throat. GARDENIA. Exhibition. Creamy white.

JONQUIL. Decorative. Clear deep yellow. LAVENDER QUEEN. Large, tall lavender.

MAID OF ORLEANS. Decorative. Milky white with cream throat. MISS BLOOMINGTON. Dec. Tall, light yellow flowers, well placed.

PELEGRINA. Exhibition. Deep blue.

PICARDY. Exhibition. Delicate apricot-pink. Flowers are all extremely large and of heavy waxlike substance.

QUEEN OF BREMEN. Decorative. Soft lavender-pink. Makes beautiful floral arrangements.

ROCKET. Exhibition. Flaming scarlet.

ROSE SPLENDOR. Decorative. Large, deep rose.

WHITE BUTTERFLY. Decorative. As the name implies, this is a dainty white, beautiful for arrangements.

75c per doz.; \$5.75 per 100.

BARCAROLE. Decorative. Midseason. Large clear orange of unusual but most exquisite clean shade. Six to seven heavily ruffled blooms open. A gorgeous variety that must be seen to be appreciated.

BEACON. Exhibition. Bright rose-scarlet with a large cream throat. Somewhat ruffled, tall and very showy.

BLACK OPAL. Exhibition. Deep maroon-red.

CORONA. Exhibition. Cream-white shading more creamy toward the throat, with wide rose picotee edge on all petals. Very distinctive and beautiful. Six to Eight very large, wide-open blooms on a head of 18 buds. Tall grower and a fine propagator.

DREAM O' BEAUTY. Exhibition. Large rose-red.

HINDENBURG'S MEMORY. Decorative. Large clear dark red.

IRAK. Decorative. Clear gray sport of Bagdad. Very beautiful used with yellow or other contrasting shades.

JEANIE. Decorative. Beautiful, distinctive, large clear pink with white midribs and creamy throat. Tall, strong grower.

KING LEAR. Decorative. Very early. Clear deep purple with silver line on edge of all petals. Large, heavily waved and ruffled, 5 to 6 open.

MARGARET BEATON. Exhibition. Pure snow-white with small scarlet blotch in the throat. Flowers very large, on a long spike.

ROSA VAN LIMA. Exhibition. Light rose with darker lines in throat. Opens up to eight or more well-placed blooms on tall, straight spike.

SHIRLEY TEMPLE. Exhibition. Rich cream, almost white, with richer cream throat mark. Six to eight very large most beautiful flowers open at a time. As a cut flower it stands up with the best of them.

SNOW PRINCESS. Exhibition. A very fine white of good size and form. Tall, with long flower spike and many open blooms that are always perfectly placed. Stems never crook. Midseason.

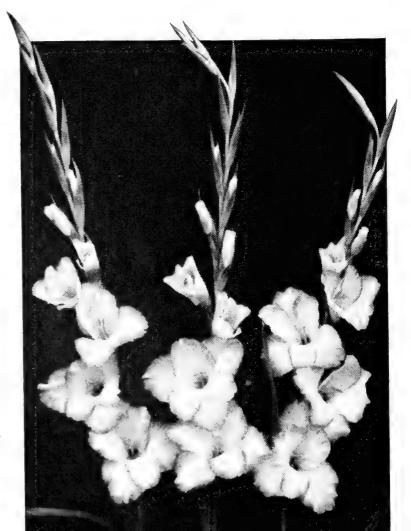
SURFSIDE. Decorative. Nicely ruffled white blooms with a fine lavender line in the throat. Tall, straight spike.

VAGABOND PRINCE. Exhibition. Iridescent garnet-brown with a scarlet blotch. Most unusual, and is lovely arranged with scarlets.

\$1.00 per doz.; \$7.95 per 100.

ALGONQUIN. Exhibition. Early, brilliant glowing scarlet, 8 to 10 wide open ruffled, needlepoint blooms open on a tall, straight spike. Many people know this one as the best scarlet on the market.

AVALON. Exhibition. Beautiful bright rosy pink, shading to a cream throat. Eight to ten heavily ruffled blooms



GRAND RAPIDS GROWERS, Inc., Grand Rapids, Michigan

BADGER BEAUTY. Exhibition. Beautiful lavender of average height with a creamy white throat. Does not fleck or grow crooked.

BUCKEYE BRONZE. Decorative. Smoky bronze.

BLUE BEAUTY. Exhibition. Light blue shading darker toward the edge. CASABLANCA. Exhibition. Heavily ruffled creamy white. Tall and beau-

CHAMOUNY. Exhibition. Deep silver-rose.

DIANE. Exhibition. Large orange.

ELIZABETH THE QUEEN. Exhibition. Giant ruffled lavender.

HIGH FINANCE. Exhibition. Light smoky orange-gray with throat. A beautifully distinctive shade, and opens up to 9 lightly ruffled blooms with rolled back petals.

KING BEE. Exhibition. Beautiful salmon-scarlet with self flecks. Commands attention.

LADY JANE. Exhibition. Large cream, fine texture.

MOHAWK. Exhibition. Large dark red.

MOTHER KADEL. Decorative. Light yellow.

MYRNA. Exhibition. Large ruffled white.

OREGON GOLD. Decorative. Large creamy yellow.

OREGON ROSE. Exhibition. Large deep rose.

PURPLE SUPREME. Exhibition. Tall, slender plant with well-placed, bright purple blossoms open at a time.

RECADO. Exhibition. Rosy ash flecked and splashed with orange-scarlet, with diffused darker blotch. The colors of a beautiful sunset.

RED CHARM. Exhibition. Very attractive shade of medium red. Fast becoming the most popular all-purpose red.

RED LIGHTNING. Decorative. Large deep scarlet, cream blotch.

RED LORY. Exhibition. Large carmine, rose-red blotch.

SENSATION. Exhibition. Bright but soft rose-salmon. Six to nine heavi-

ly ruffled, huge blooms on a long flower head.
SILENTIUM. Decorative. Pure white with rose blotch, plant grows tall and always straight with a slender willowy stem.

WHITE GOLD. Decorative. Very large clear light cream, shading to a lighter throat. Four to six huge blooms open on a long flower head. EXEMPLAR. Decorative. Ruffled salmon-pink florets with cream throat.

15c each; \$1.50 per doz.

LEADING LADY. Decorative. A cream-white, with canary-yellow throat. Real large. Similar to Picardy, except in color.

BURMA. Exhibition. Large ruffled, deep rose.

OGARITA. Exhibition. Giant growing, rose-salmon.

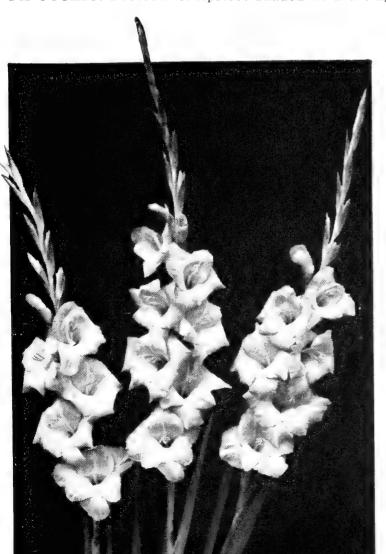
HEAVENLY WHITE. Exhibition. White flushed with lavender.

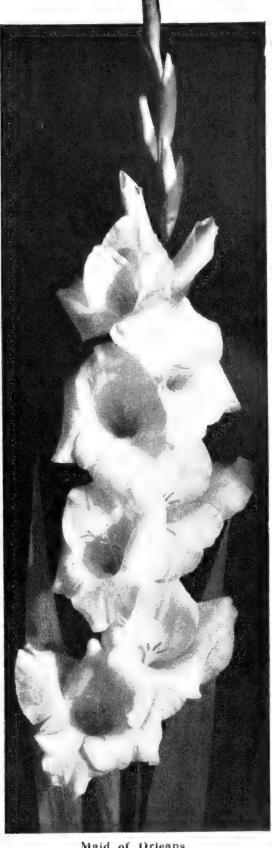
DR. WHITELEY. Exhibition. Giant yellowish apricot.

HAWKEYE RED. Exhibition. Bright red. Sport of Vagabond Prince.

LAVENDER and GOLD. Decorative. Lavender. Medium size.

PINOCCHIO. Decorative. Apricot shaded with a tinge of green.





Maid of Orleans

Special NEW VARIETIES

SPOTLIGHT. Decorative. Large, deep yellow, with red blotch. Florets are of large size and are perfectly placed. One of the finest that is grown. 20c each; \$2.00 per doz.

MINSTREL. Decorative. Giant lavender. A real large exhibition variety. 50c each; \$5.00 per doz.

ORIENTAL PEARL. Decorative. A massive cream colored, real large, 7 florets. 50c each; \$5.00 per doz.

ALL BULBS LISTED ARE SUBJECT TO THE 3% MICHIGAN STATE SALES TAX, and are postpaid anywhere in Michigan. Elsewhere, postage extra, see rates page 3.

DAHLIA, Unwin's Dwarf Hybrids. 4 ozs., \$5.00; 1 oz., \$1.40; ½ oz., 40c.

Double Daisy (BELLIS PERENNIS) (P) (12,500 seeds per oz.)

A favorite low growing spring flowering plant. Loves a shady place and rich soil. 6-8 in. Double choice mixture. Oz., \$8.00; ½ oz., \$2.50; ½ oz., \$1.50; pkt., 10c.

Delphinium (PERENNIAL LARKSPUR) (P) (10,000 seeds per oz.)

Pacific Giants, Mixed. This new strain produces plants that are 60-65 per cent mildew-resistant. The flowers are immense size, tightly set on straight stems. The flowers do not shatter and are fine for cut flowers. Pkt., 10c.

Pacific Giants, McLaughlin's Strain. Pkt., 25c.

Forget-Me-Not (MYOSOTIS) (B)

(42,000 seeds per oz.)

They are considered among the best spring flowers. They prefer moist, cool soil, and will bloom freely in fall and early spring.

Victoria. Sky-blue. 1 oz., \$2.50; $\frac{1}{4}$ oz., \$6c; pkt., 10c.

Four O'clock (MIRABILIS) (A)

(350 seeds per oz.)

Marvel of Peru. Mixed colors. 1/4 lb., \$1.25; oz., 40c; pkt., 10c.

GLADIOLUS

Our "Grand River Collection" Of Gladiolus is fully listed on the outside back cover. For all the others turn this page over.

"A thing of beauty is a joy forever."



Gaillardia



Delphinium-Larkspur

Foxglove (DIGITALIS) (B)

(200,000 seeds per oz.)

Bearing long spikes of beautifully colored flowers; fine for planting in hardy borders or among shrubbery. Mixed. Oz., \$1.50; ½ oz., 50c; pkt., 10c.

Gaillardia (BLANKET FLOWER) (A)

(15,000 seeds per oz.)

Picta Lorenziana. Double flowers, mixed colors. 1/4 oz., 50c; pkt., 10c.

Gaillardia (P)

Bloom from June to October. Their long flowering period, long stems and bright colors make these one of the most valuable perennials, being easily grown in beds and borders.

Grandiflora. Mixed, single. ¼ oz., 50c; pkt., 10c.

GEUM, Double Scarlet. Pkt., 10c.

GOURDS, Small Fruited Mixed. Oz., 30c; pkt., 10c.



Forget-Me-Not

HELIOTROPE. Dark varieties mixed. Pkt., 10c. HESPERIS. Purple or white. Pkt. 10c. HIBISCUS. Pkt. 10c.

Hollyhocks (P)

(3,800 seeds per oz.)

Make a fine row in the garden and an excellent background to cover a high wall or fence. 6 to 8 ft. Double Mixed. Double and semi-double. 1/4 oz., 65c; pkt., 10c.

HOLLYHOCK, Indian Spring. Pkt., 10c. HUNNEMANNIA. Pkt., 10c. ICELAND POPPY, Sunbeam Mixed. Pkt., 10c. KOCHIA Childsi, Pkt. 10c. LANTANA. Pkt. 10c.

Larkspur (A)

(8,700 seeds per oz.)

The graceful spikes of blooms are much valued for They continue long in bloom.

Double Mixed. All colors. 4 ozs., \$3.60; oz., \$1.10; ¼ oz., 40c; pkt., 10c.

Giant Imperial Mixed. 3 feet. Derives its name from

the striking resemblance of the flowers to the Double Hyacinth. Delicate colors. 4 ozs., \$3.00; 1 oz.,

\$1.00; ¼ oz., 30c; pkt., 10c.
Rosamond. Deep pink. Pkt., 10c.
Super Majestic. Pkt., 10c.
Salmon Rose. Pkt., 10c.
Blue Spire. Pkt., 10c.
White King Pkt. 10c. White King. Pkt., 10c.
Majestic Rose. Pink. Pkt., 10c.

FOR PERENNIAL VARIETIES, see DELPHINIUM LAVENDER. Pkt., 10c. LOBELIA, Crystal Palace. Pkt., 10c. LUNARIA, Biennis. Pkt., 10c. LUPIN, Perennial Mixed. Pkt., 10c.

Marigold (TAGETES) (A)

(10,000 seeds per oz.)

Sunset Giants. Huge flowers; colors range through orange, yellow and primrose. A tall variety and a beauty. 4 ozs., \$4.75; oz., \$1.50; ¼ oz., 45c; pkt., 10c. Guinea Gold. 2 to 2½ feet. An unusual type of Marigold, color orange flushed with gold. Nearly all flowers are double or semi-double and their odor is less purgent than that of other Marigolds. 4 ozs. less pungent than that of other Marigolds. 4 ozs.,

\$5.00; oz., \$1.50; ¼ oz, 45c; pkt., 10c. Yeliow Supreme. A large, fluffy, well rounded bloom of delicately milk-honey fragrance, with broad, loose frilled petals of a rich, creamy lemon color. Plants practically free from objectionable Marigold odor. 4 ozs., \$5.00; 1 oz., \$1.50; ½ oz., 45c; pkt. 10c. Double Tall African. 4 ozs., \$4.75; oz., \$1.50; ½ oz.,

45c; pkt., 10c. Double Dwarf French. 4 ozs., \$3.00; 1 oz., \$1.20;

1/4 oz., 40c; pkt., 10c. Gold Medal Blend. Pkt., 10c.

Harmony. 12 to 14 inch. An annual dwarf French Marigold having scabious-like flowers of deep orange with maroon collars of broad petals, crested centers. Usually free flowering and very early. 4 ozs., \$2.75; 1 oz., 80c; $\frac{1}{4}$ oz., 25c; pkt., 10c. Yellow Pygmy. 4 ozs., \$5.00; 1 oz., \$1.50; $\frac{1}{4}$ oz., 45c;

pkt., 10c. Spry. (See this in colors in the center of catalog.) 4

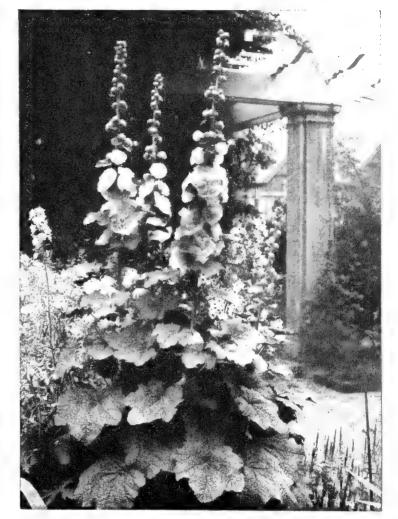
ozs., \$5.50; 1 oz., \$1.60; ½ oz., 50c; pkt., 10c. Burpee Gold. Pkt., 10c. MATTHIOLA. Pkt., 10c.

Morning Glory (IPOMOEA) (A) (200 seeds per oz.)

Deservedly very popular as they are one of the most free flowering and rapid growing plants in cultivation; the beauty and delicacy of their brilliant flowers are unsurpassed. Soaking the seed in warm

water for an hour or two hastens germination. Common, Mixed. Oz., 25c; pkt., 10c. Oriental, Mixed. Oz., 60c; pkt., 10c. Heavenly Blue. Oz., 60c; pkt., 10c. Scarlett O'Hara. Oz., \$1.15; pkt., 15c. Pearly Gates. Oz., \$1.00; pkt., 15c.

Giant Cornell. Red with white edge. The best red large flowered Morning Glory. Oz., \$1.35; pkt., 15c. Crimson Rambler. Pkt., 10c.



Double Hollyhocks

Mignonette (A)

(30,000 seeds per oz.)

Machet. The best for all purposes. Of dwarf habit, with very large red flowers and handsome foliage. Pkt., 10c.

MOMORDICA, Mixed. Pkt., 10c. MOONFLOWER. Pkt., 10c.



Scabiosa-Mourning Bride (A). Listed on page 51



Nasturtiums (A)

For ease of culture, duration of bloom, brilliancy of coloring and general excellence, nothing excels them. All they need is a moderately good soil, in a well drained sunny position, and within a few weeks from the time they are sown until hard frost comes there is an endless profusion of blossoms.

Dwarf, Mixed. 4 ozs., 75c; 1 oz., 20c; pkt., 10c.

Tall, Mixed. 4 ozs., 75c; 1 oz., 20c; pkt., 10c.

Scarlet Gleam. Plain petaled and deep throated. This is a sweet scented variety similar to Golden Gleam. 4 ozs., 80c; 1 oz., 25c; pkt., 10c.

Golden Gleam. An attractive, double-flowered, sweetscented variety adapted to culture as a bedding or pot plants. Also valuable for cut flowers. 4 ozs., 80c; oz., 25c; pkt., 10c.

Double Glorious Gleam Hybrids. These hybrids are a collection of gorgeously colored, large, well formed flowers of such dazzling beauty and colors that were never dreamed of before in a double Nasturtium. Mixed colors. 4 ozs., 90c; 1 oz., 25c; pkt., 10c.

NEMESIA, Triumph Mixed. Pkt., 10c. NICOTIANA, Evening Star. Pkt., 10c. OENOTHERA. See Primrose. Pkt., 10c.

Pyrethrum (P) (PAINTED DAISY)

One of the most valuable of our early summer flowers. Charming colors and wonderful lasting properties as a cut flower. Flowers in May and June and frequently in August and September; in all shades of rose and pink. Height 1 to 2 feet

Roseum. Single mixed. Oz., \$7.00; 1/4 oz., \$2.00; pkt., 10c.

Petunias (A)

(250,000 seeds per oz.)

The Petunia loves a rich soil and thrives best in a sunny location. Pinch back freely. This causes the plants to branch out and spread, shading the ground, thereby helping to conserve the moisture. Keep the raded flowers clipped.

Single Giant Flowering Varieties

The flowers of this strain average five to seven inches across and are wonderful.

Giants of California, Dwarf Extra Choice Blend. $\frac{1}{4}$ oz., \$15.00; $\frac{1}{8}$ oz., \$8.00; $\frac{1}{16}$ oz., \$4.50; pkt., 50c. Giants of California Mixed. The flowers are very large and the colors embrace every conceivable shade of crimson, white, violet, lavender, etc. ¼ oz., \$12.50; % oz., \$7.00; 1/16 oz., \$4.00; pkt., 25c.

Balcony or Trailing

(15 in.) To droop over the edge of a window box or to overhang a terrace, these are the best Petunias to select. In their several colors the single flowers are very gay either alone or in combination.

Balcony Black Prince. Deep velvety mahogany-red, black throat. 1 oz., \$6.75; ½ oz., \$1.85; ½ oz., \$1.00; pkt., 25c.

Deep violet-blue. Oz., \$6.00; ¼ oz., Balcony Blue. \$1.65; pkt., 15c.

Balcony Rose. Vivid rosy pink. Oz., \$5.25; 1/4 oz., \$1.50; pkt., 15c.

Balcony Mixed. Several colors. Oz., \$5.25; ¼ oz., \$1.50; pkt., 15c.

Special Mixture of Dwarf Small-Flowering Varieties. Includes all the varieties listed and many others, and will be a revelation to those who plant a packet in furnishing an unending supply of flowers in a most bewildering combination of colors as long as the summer lasts. Oz., \$3.75; ¼ oz., \$1.00; pkt., 10c.

Celestial Rose. An improvement on the Rosy Morn. More compact in growth and deeper in color. A beautiful rich satiny rose. Oz., \$5.00; ¼ oz., \$1.50; ½ oz., 90c; pkt., 10c.

Violacea. Deep violet, compact. Oz., \$5.00; ¼ oz., \$1.50; ½ oz., 90c; pkt., 15c.

Snowball. Pure white; very compact. Oz., \$4.00; ¼

oz., \$1.10; pkt., 15c.

Silver (Heavenly) Blue. Pkt., 10c.

Howard's Star. Pkt., 10c. White King. Pkt., 10c. Glow. Pkt., 25c.

King Henry. Pkt., 25c. Giant Ruffled and Fringed. Pkt., 25c.

Double Fringed Dwarf Max. Mixed. Pkt., 75c. Dwarf Max. Double Fringed. Mixed. Pkt., \$1.25.



Rosy Morn Petunia

Salmon Supreme. Pkt., 25c.
Hollywood Star. Pkt., 25c.
Rose King Improved. Pkt., 10c.
Cream Star. Dwarf. Pkt., 10c.
First Lady. Dwarf. Pkt., 25c.
Rose Bedder. Dwarf. Pkt. 10c.
Midget. Mixed. Pkt., 10c.
Rosy Morn Select. The plants are bushy and compact,

Rosy Morn Select. The plants are bushy and compact, flowers of medium size, produced in great abundance the entire summer and fall; are of a most pleasing clear pink, contrasted by a broad white

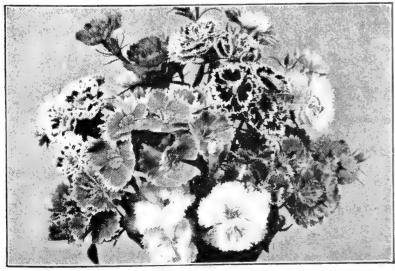


Single Petunia, Elks Pride

Pinks (DIANTHUS) (P)

(28,000 seeds per oz.)

Double. Selection of the best double Pinks in cultivation. Flowers ranging in color through all the brightest and most brilliant shades. Oz., \$1.10; 1/4 oz., 35c; pkt., 10c.



Garden Pinks



Oriental Poppies

Phlox (A) (18,000 seeds per oz.)

The annual Phloxes are dazzling in effect, particularly so when sown in masses or ribbon beds of contrasting colors. Few flowers are so easy to grow from seed, so pretty and compact in habit, so quick to bloom, or give such a brilliant display of color for so little cost or care.

Phlox Drummondi. Unsurpassed for variety of colors. Mixed. Oz., \$2.95; ¼ oz., 90c; pkt., 10c.

Scarlet, Large Flowering. Pkt., 10c.

Phlox Decussata. (Perennial.) 1/4 oz., \$1.00; pkt., 10c.

Oriental Poppies (P)

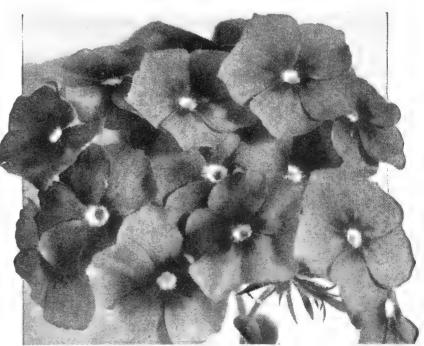
(448,000 seeds per oz.)

These should be sown in early spring in the open ground as soon as it is fit to work. The plants disappear during July and August appearing again as soon as the weather gets cool. It is well to mark the place with a stick so the roots will not be disturbed during the resting period. When the fall growth starts they should be transplanted to their permanent flowering quarters. Flowers of immense size, 6 inches and over, of many novel colors.

Hybrids, New Mixture. $\frac{1}{4}$ oz., \$1.25; pkt., 10c.

Scarlet. ¼ oz., \$1.00; pkt., 10c.

PRIMULA, Primrose. Pkt., 10c.



Phlox Drummondi



Portulaca-Rose Moss

Poppies (A)

(73,600 seeds per oz.)

Should be sown as early in the spring as possible, where they are to remain, as they will not stand transplanting. Sow very thinly; they must not stand nearer than 5 or 6 inches apart if you wish best results.

Shirley, Single. Lovely and dainty shades, many edged and shaded with other colors. 4 oz., 20c; oz., 60c;

Shirley, Double. Beautiful double satiny flowers in shades of white, pink and old rose with white cen-

ters. Oz., 80c; ½ oz., 25c; pkt., 10c. American Legion. Pkt., 10c. Double Shirley, Sweet Briar. Pkt., 10c.

Pansies (B)

(12,000 seeds per oz.)

They like a cool, moist soil and protection from the wind as well as the noon-day sun. Seed should be sown in the house and transplanted when danger of frost is over. For large flowers, early in the spring, the seed should be sown in August or September and the plants protected with a cold frame during the winter. May also be sown out-of-doors in the spring for late summer and fall flowers.

Improved Swiss Giants. The flowers are of gigantic size, perfectly round, fine substance of flower and good form of plant. They bloom early in the spring, continuing in flower all summer until late in the fall. 4 ozs., \$30.00; oz., \$10.00; ½ oz., \$3.00; ½ oz., \$1.75; pkt., 10c.

Giant Mixture, Donovan Strain. Flowers very large, and great diversity of colors. This mixture contains all the good ones. 4 ozs., \$28.00; oz., \$9.00; ¼ oz.,

\$2.50; pkt., 10c.
PRIMROSE, Showy Evening. Pkt., 10c.
PRIMULA, Malacoides, New Baby. Pkt., 25c.
RANUNCULUS. Pkt., 10c.

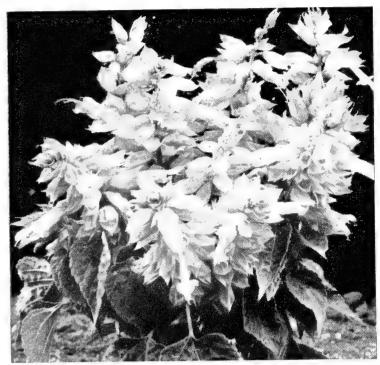
Portulaca (ROSE MOSS) (A)

(300,000 seeds per oz.)

This plant will grow and bloom profusely in dry. hot situations, where almost any other plant would soon die. Easily transplanted. In sowing mix the seed with dry sand to insure an even distribution. Sow in May when the ground is thoroughly warmed, and soon the loveliest of floral carpets will appear. Double Best Mixture. Oz., \$2.75; ¼ oz., 80c; pkt., 10c. Single Mixed. Oz., \$1.75; ¼ oz., 50c; pkt., 10c.

Salvia FLOWERING SAGE) (A) (7.500 seeds per oz.)

A hedge or bed of Salvias is a blaze of color during late summer and fall, bloom in spikes and continuing to bloom until killed by hard frosts. Seed should be started indoors, sow about 1/4 inch deep; transplant when soil is well warmed, about 12 to 18 inches apart.



Salvia, Fireball

Splendens. 2½ ft. The well known variety, fiery scarlet. 4 ozs., \$12.00; oz., \$3.50; ½ oz., \$1.00; pkt., 10c.

Bonfire. 24 inches. 4 ozs., \$14.00; oz., \$4.00; 1/4 oz., \$1.25; pkt., 10c.

America. 18 inches. Early. Dwarf. 4 ozs., \$14.00; oz., \$4.00; ½ oz., \$1.25; pkt, 10c.

Farinacea. Blue. Oz., \$6.00; 1/4 oz., \$2.00; pkt., 15c.



Salpiglossis

Salpiglossis (A)

(125,000 seeds per oz.)

Undoubtedly one of the most attractive annuals and should be in every garden. The blossoms are tube-shaped, much like a Petunia but rivaling the latter in the beautiful colors displayed. Nearly every flower is veined with a glint of gold. Flowers are large and last well in water, really better than on the plants. Large Flowering Mixed. Oz., \$1.40; ½ oz., 40c; pkt., 10c.

Scarlet Runner (A)

(30 seeds per oz.)

A very rapid grower, bearing large sprays of bright scarlet, pealike flowers from early summer to late fall. ¼ lb., 75c; oz., 25c; pkt., 10c.

Shasta Daisy (P) (CHRYSANTHEMUM LEUCANTHEMUM) (18,000 seeds per oz.)

Grows very bushy, bearing all summer a profusion of immense white flowers on long stems. $\frac{1}{4}$ oz., 40c; pkt., 10c.

Scabiosa

(Mourning Bride) (A) (3,500 seeds per oz.) Grandiflora Mixed. Our

latest special mixture and we are sure the delicate soft colors will be admired by all our friends. Pictured on page 37. 4 ozs., \$3.00; oz., 90c; ½ oz., 35c; pkt., 10c.

Blue Moon. Pkt., 10c.

Caucasica. Lavender-blue. Pkt., 25c.

SENSÍTIVE PLANT. Pkt., 10c

SCHIZANTHUS. Dr. Badger. Pkt., 10c.



Shasta Daisies

Rust-Proof Snapdragon (A)

(ANTIRRHINUM) (220,000 seeds per oz.)

For gorgeous coloring few flowers can match Snap-dragons. The flowers are of very large size, very fragrant, and are produced on immense long spikes, which render them well adapted for cut flowers. These strains are the finest obtainable.

Dwarf Mixed. 4 ozs., \$10.00; 1 oz., \$2.50; 1/4 oz., 70c;

pkt., 10c. Tall Mixed. 4 ozs., \$9.00; 1 oz, \$2.00; ½ oz., 60c;

pkt., 10c. Giant Bedding Pink. R. R. Pkt., 10c. Giant Bedding White. R. R. Pkt., 10c. Giant Bedding Yellow. R. R. Pkt., 10c. Giant Bedding Mixed. R. R. Pkt., 10c.

Stocks (1)

(19,000 seeds per oz.)

Ten Weeks Large Flowering. The favorite sort for bedding. Grows about 1 ft. high. Mixed, all colors, 4 ozs., \$6.00; oz., \$1.75; ½ oz., 50c; pkt., 10c.

Mammoth Beauty of Nice, Mixed. Pkt., 10c.

Giant Imperial Purple. Pkt., 10c.

Giant Imperial Purple. Pkt., 10c.

Giant Imperial Rose. Pkt., 10c. Giant Imperial Golden Rose. Pkt., 10c.

Sunflower (HELIANTHUS) (A)

(700 seeds per oz.)

Of easiest culture. Suitable for backgrounds, screens, and to plant among shrubbery. It blooms

from June till frost. 3 to 6 feet. Double Chrysanthemum-Flowered. Large, golden yellow flowers, resembling a Chrysanthemum. 4 ozs., \$1.85; oz., 50c; pkt., 10c.
Red and Gold. Pkt., 10c.
SNOW-ON-THE-MOUNTAIN. Pkt., 10c.

STATICE, Mixed. Pkt., 10c.



Sweet William

Strawflower (HELICHRYSUM) (A)

(45,000 seeds per oz.)

An ornament to the garden when growing, and are prized everywhere for the winter decoration of vases, and for durable bouquets. Flowers intended for drying should be gathered when partially unfolded and suspended with their heads downward in a cool place. Mixed, All Colors. 4 ozs., \$4.50; oz., \$1.25; 1/4 oz., 40c;

pkt., 10c. SWEET SULTAN. Pkt., 10c.

Sweet William (P)

(31,000 seeds per oz.)

This sturdy, reliable old-fashioned favorite is still a source of delight in the garden of today. Seed may be sown at any time from spring to midsummer. The charm of the great trusses of lovely color seems to be lost when it is planted as a mixture in masses. It is best if you give slight protection during the winter. It likes warm, rich soil. 2 feet.

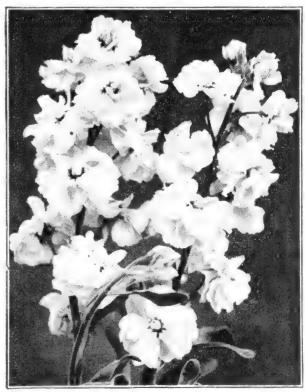
Single, Finest Mixed. A very choice assortment of all the best single flowered varieties. 4 ozs., \$4.50;

oz., \$1.25; ¼ oz., 40c; pkt., 10c.

Double Mixed. This mixture you will find of superior quality, containing all colors and shades. 4 ozs., \$7.50; oz., \$1.90; ¼ oz., 55c; pkt., 10c.

Single Early Flowering. Dwarf Midget Mixed. 6 inches.

A dwarf variety ideally adapted for early flowering, and for the perennial border as well as pot plants. 4 ozs., \$8.00; oz., \$2.50; ¼ oz., 75c; pkt., 10c. SWEET WIVELSFIELD. Pkt., 10c. TEXAS BLUE BONNET. Pkt., 10c.



Ten Weeks Stocks

Tulips, Hyacinths, Crocus, Daffodils, Narcissus for Fall Planting

These are imported bulbs from the Netherlands, and will not be available until September 15th, 1949, at which time we will be glad to quote prices on request.

Tulips, Darwin (Top Size)

Clara Butt. Clear salmon-pink with a white base flecked blue-grey. 26 inches tall. An old favorite.

Golden Age. Large, deep golden yellow slightly shaded orange when fully developed. 26 inches tall. Fine shape.

Insurpassable. Very large lilac with slightly lighter edges. A tall, strong stem. The best lilac. 28 inches tall.

La Tulipe Noire. The black Tulip. Deep maroon-black. Definitely the closest to a real black. 26 inches tall.

Niphetos. Beautiful soft yellow, lemon-yellow inside with ivory anthers. Long flowers on a strong stem. 27 inches tall.

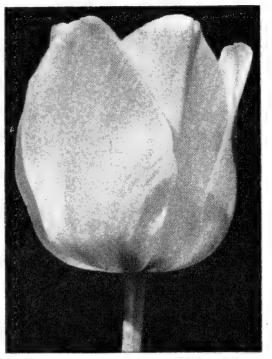
Pride of Haarlem. One of the best known and most popular varieties. Brilliant cerise-scarlet with a blue base. 28 inches tall.

Princess Elizabeth. Lovely soft rose-pink with lighter edges and a white base. Good forcing variety also 26 inches tall.

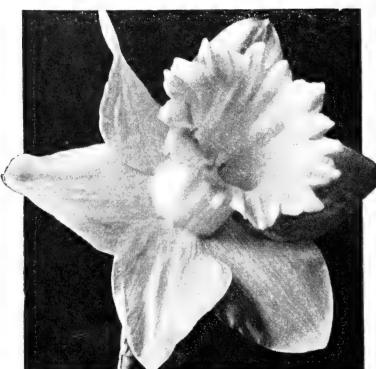
Scarlet Beauty. Beautiful, bright vermilion-scarlet with a dark blue base edged white. 26 inches tall.

The Bishop, Beautiful deep violet with a small, dull blue base edged white and purple anthers. 29 inches tall.

Zwanenberg. Large pure white with black anthers. Tall stem. A very popular variety. 28 inches tall.



Tulip, Clara Butt



Narcissus, King Alfred

Narcissus and Daffodils

(No. 1 bulbs)

King Alfred. Golden yellow. Broad perianth and a large trumpet frilled at the mouth. Popular. 16 inches.

Mrs. E. H. Krelage. Pure white perianth and a creamy white trumpet recurving at the brim. 20 inches.

Spring Glory. Pure white perianth and a deep golden yellow trumpet, recurving at the mouth. 18 inches.

Laurens Koster, (Poetaz), Creamy white perianth and a lemon-yellow center. Very fragrant. Several flowers on a stem. 14 inches.

Hyacinths (17-18 cm.)

City of Haarlem. Large pure yellow. Compact blossom of fine form.

Grand Maitre. Deep lavender-blue. Very large spike.

La Victoire. Bright carmine-rose. Large spike and a very fine, sturdy stem.

L' Innocence. Pure white. Large spike with large bells.

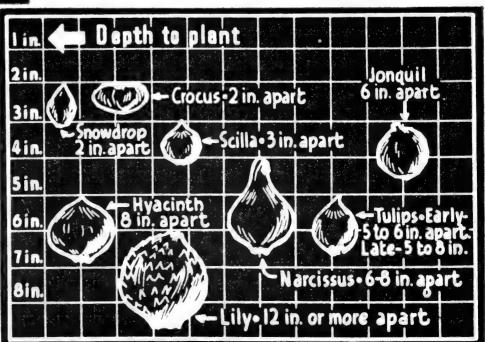
Queen of The Pinks. Bright rose-pink. Enormous, compact spike.

Crocus (Top Size)

Kathleen Parlow. Large pure white with yellow anthers.

King of the Stripes. Large white with purple stripes. Mammoth Yellow. Large golden yellow.

Purpurea Grandiflora. Rich, deep purple. Immense flowers.



Beautiful Sweet Peas

(340 seeds per oz.)

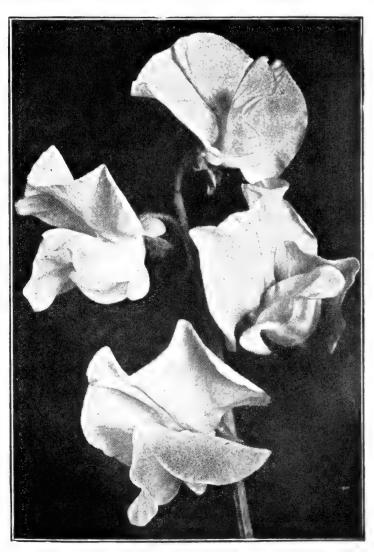
To grow Sweet Peas successfully it is necessary to plant EARLY and give plenty of moisture. They should go in the ground as soon as the ground can be worked and should be planted six inches deep, being covered at first with only two inches of soil, the trench being filled as the plants grow. It is best to soak the seeds for several hours before they are planted. If this plan of planting early is followed, and if the Sweet Peas are kept mulched with peat moss, lawn clippings or else watered abundantly, they will certainly give a fine crop of lovely flowers held in admiration by every flower lover. The mixture we give you below will give you color in profusion and is well worth your consideration.

Cuthbertson Mixed

Spring Flowering

A great many people prefer to grow Sweet Peas in the mixed colors. Our superb Cuthbertson Mixture is made up of all the best varieties obtainable. The greatest care is taken to insure a well balanced range of colors and worthy of a place in any garden. Pkt., 10c; oz., 25c; ¼ lb., 65c; 1 lb., \$2.25, postpaid.

The Cuthbertson, which we are offering instead of the Spencers, is a new type of Sweet Pea characterized by its excellent heat resistance. Comes into bloom midway between the early and late Spencers, and continues much longer, even in hot weather, when most Spencer varieties fade. The flowers are plainer than the Spencer type, but large with good stems. Results to date indicate that it is preferable in most localities.





Cuthbertson In Separate Colors

We give you below the best of the Cuthbertson varieties in a range of individual colors for those who want to work out a color scheme. Each one is a rare beauty and worthy of a place in your garden.

Danny. Blue.
David. Rose-crimson.
Evelyn. Cream-pink.
Lois. Rose-pink.
Janet. White.
Tommy. Marine-blue.

Kenneth. Crimson.

Any of the above: Pkt., 10c.

Perennial Sweet Peas. (Lathyrus latifolius.) (Hardy Sweet Pea). Very decorative, climbing vine of the Pea family for growing on fences, trellis, etc., and for cutting. Blooms all summer if the seed pods are removed. Mixed. Oz., \$1.25; pkt., 10c.



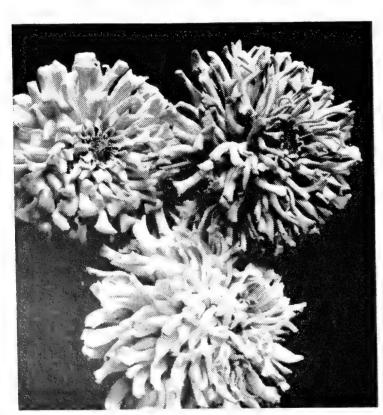
Verbena (A)

(12,500 seeds per oz.)

One of our trustworthy garden companions. Of trailing habit. The foliage makes a perfect carpet and a fine background for the broad, flat flower heads of many brilliant colors. Sow in boxes in the house and transplant when the seedlings are an inch high, and set outside after danger of frost is past in a warm supply spot in a warm, sunny spot.

Mammoth Mixed. Producing in handsome umbels, flowers of large size in beautiful shades of white, rose, scarlet, blue and purple. 4 ozs., \$6.50; oz., \$1.90; ½ oz., 60c; pkt., 10c.

Scarlet (Defiance). Pkt., 10c.



Zinnia, Fantasy

VIOLA, Blue Perfection. Pkt., 25c. Jersey Gem. Pkt., 25c. Mixed. Pkt., 10c.

WHITLAVIA. Pkt., 10c.

VINCA, Rosea. Pkt., 10c.

VIRGINIAN STOCK, Mixed. Pkt., 10c.

WALLFLOWER, Double Mixed. Pkt., 10c.

WILD GARDEN MIXTURE. Pkt., 10c.

Zinnias (A)

500-4,000 seeds per oz.)

Splendid hardy annuals making a brilliant profusion of color and succeeding well in any soil. They will retain their beauty for several weeks and bloom until frost.

This new Fantasy mixture with rounded flowers is composed of a mass of shaggy, raylike petals which give a delicate and refined appearance to the medium sized double flowers. The color range includes the brightest shades of red and orange, as well as the popular pastel pinks and cream. 1 lb., \$11.00; 4 ozs., \$3.00; oz., 90c; ¼ oz., 35c; pkt., 10c.

Double Fantasy Mexicana Hybrid. Pkt., 10c.

Colossal or California Giant Flowered. The flowers are gigantic in size; thickly set with velvety petals. The plants are vigorous, branching freely and are fine for cutting. Mixed colors. 1 lb., \$10.00; 4 ozs., \$2.75; oz., 80c; pkt., 10c.

Giant Double Lavender. Pkt., 10c.

Giant Double Purple. Pkt., 10c.

Giant Double Crimson. Pkt., 10c.

Giant Double Rose. Pkt., 10c.

Giant Double Yellow. Pkt., 10c. Giant Double Orange. Pkt., 10c.

Giant Double Pink. Pkt., 10c.

Giant Double White. Pkt., 10c.

Giant Dahlia-Flowered. In formation the broad petals are closely imbricated, sometimes seeming almost to be piled one upon the other. The flowers often measure 4 inches in depth and 6 to 8 inches in diameter. In general appearance the flowers compare with the show Dahlias. Mixed colors. 1 lb., \$10.00; 4 ozs., \$2.75; oz., 80c; pkt., 10c.

Dahlia-Flowered Crimson. Pkt., 10c.

Dahlia-Flowered Orange and Gold. Pkt., 10c.

Dahlia-Flowered Scarlet. Pkt., 10c.

Lilliput Double, Mixed, or "Pompon." 12 inches. The plants form handsome little bushes and fairly bristle with tiny, short-stemmed, very double flowers hardly exceeding a daisy flower in size. They are pretty plants. 1 lb., \$10.00; 4 ozs., \$2.75; oz., 80c; pkt., 10c.

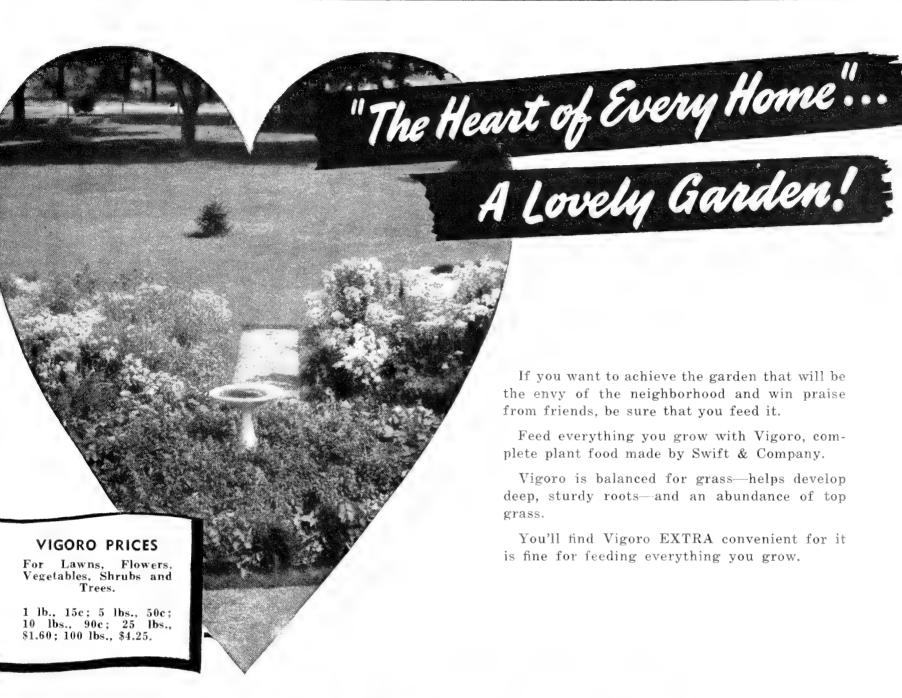
Indian Summer Giant Mixture. Pkt., 10c.

All Giant Pastel Mixture. Pkt., 10c.

Creeping Zinnia. Pkt., 10c.

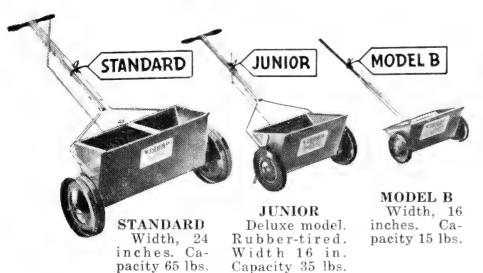
Cupid Tiny Tim. Pkt., 10c.

All prices quoted herein are subject to available stocks on hand, and subject to change without notice.



A PRODUCT OF SWIFT

COMPLETE PLANT FOOD



USE A VIGORO SPREADER!

Once you use a Vigoro Spreader you'll say it's just as important as your lawn mower... Applies Vigoro at proper rate of application quickly and easily. Sows grass seed to perfection at a big saving in seed. All models sturdily constructed of metal to last many years.

SPECIAL (Not Shown) Width, 36 in. Capacity 100 lbs. Ask for Prices
Do a better job of applying Vigoro, lawn seed, etc. Saves time, money and labor.

FIELD and FARM SEEDS



Alfalfa and Clovers

The acreage seeded to Alfalfa in Michigan is increasing every year. All of our seed is northern grown, therefore, it is best adapted to our climate.

Grimm Alfalfa Common Alfalfa Medium Red or June Clover Mammoth or Large Red Clover Alsike Clover White Blossom Sweet Clover Yellow Blossom Sweet Clover

Timothy
Orchard Grass
Sudan Grass
Reed Canary Grass
Brome Grass (Bromus Inermis)
Amber Cane
Atlas Sorgo
Soy Beans
Japanese Millet
Golden Millet
Lespedeza
Dwarf Essex Rape
Sand Vetch
Silverhull Buckwheat
Canadian Field Peas
Wisconsin 38 Barley
Marion Oats
Huron Oats
Vickland Oats

Seed Corn

Kingcrost Hybrids Michigan Hybrids Silobred Ensilage Wisconsin 355

OPEN POLLINATED

Pickett's Yellow Dent Golden Glow Early Murdock Early White Cap Yellow Dent

Fodder Corn

Leaming Red Cob

Inoculate all Legume Seeds with

1898—FIFTY-ONE YEA When ordering, Always	
ALFALFA (A) Sweet, Bur, Hubam Clovers Size Retail 1 bu. each \$0.50 2½ bu. each 1.00 CLOVERS (B) Red, Alsike, Crimson, White and Ladino 1 bu. each \$0.50 2½ bu. each 1.00 LESPEDEZA (L) 100 lb. size (Inoculates up to 100 lbs.) ea. \$0.50 PEAS, (C) VETCHES (All Varieties) 100 lb. size (Inoculates up	SOYBEANS (S) Size Retail 2 bu. each
and for Red, Medium Red, Ma Alsike and Ladino Clovers of	, Bur Clover, Hubam Clover ammoth, White Dutch, White,
SPECIAL CULTURES For Lima Beans, Bird's For Lima Beans, Bird's For tus Uliginosus), Black Locu Crown Vetch, Garbanzo or Cogo, Cracca, Tephorsia, Sesban 1/8 bu. LUPINES (All Varieties) 100 lb. size (Inoculates up to GARDEN SIZE—Peas, Beans Beans and Edible Soybeans.	oot Trefoil, Big Trefoil, (Lo- 1st, Dalea or Wood's Clover, Chick Peas, Guar, Hairy Indi-

GARDEX Hand Tools

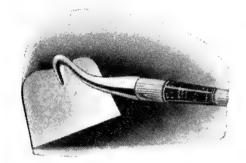




14 teeth, 14 inches wide, depth of head 3% inches, handle 5 feet. \$1.70 each.



Floral Rake 10 teeth, 7½ inches wide, depth of head 29/16 inches, handle 3¾ feet. \$1.00 each.

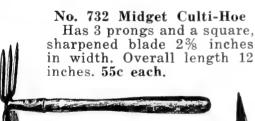


No. 906½ Garden and Field Hoe Sharpened blade, half polished, of high carbon steel; width 6½ inches, 4-foot handle. \$1.05 each.



No. 121-5

Has a single bow for close-in work. Ideal for shrubbery and under plant leaves. Light in weight. 5 inches wide, 4-ft. handle. \$1.35 each.



No. 721 Midget Culti-Spade

Has 2 prongs and a pointed, sharpened blade 2% inches in width. Overall length 12 inches. 50c each.

No. 4107 Scuffle Hoe



A push type hoe for drive-ways as well as gardens. 7 inches wide. Depth 1% in. Handle 4½ ft. \$1.50 each.



No. 404 Wire Broom
Made exactly as the No. 403 except it has round wire teeth. 20 teeth, 20 inches wide, handle 4 feet.

\$1.50 each.



No. 740 Trowel High carbon steel blade. Depth 51/8 inches, width 31/4 inches, over-



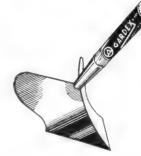
all length 1114 inches. 60c each.

No. 741 Transplanting Trowel High carbon steel blade. Depth 5% inches, width 2 inches. Overall length 12 inches. 60c each.



No. 200-6 Hand Plow 6 in. wide, 5-ft. handle. \$2.10 each. No. 200-8

No. 200-8
Hand Plow
8 in. wide,
5-ft. handle.
\$2.60 each.





No. 714 Midget Culti-Weeder Same as No. 713 with weeding blade added. 50c each.



No. 703 Midget Fork Handy for many purposes. 3 in. wide; overall length 11 in. 40c each. No. 1635 Diamond Point Hand Cultivator

7 tools in one. It's interchangeable for wide or narrow rows or to straddle row. Adjustable 13/16-inch to 8-inch width. 4½-ft. handle. \$2.60



No. 1605 Hand Cultivator

7 tools in one cultivator. Can be changed in a jiffy. Ideal for hotbeds or greenhouses. Adjustable ¾-inch to 7-inch width. 4½-ft. handle. S1.85 each.

No. 1553 Improved 3-Prong Cultivator

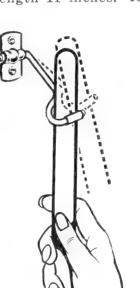
Diamond point shares, 6 inches wide. Handle 4½ feet. \$1.85 each.



Designed for loosening and air conditioning the soil. $3\frac{1}{2}$ inches wide. 4-foot handle. \$1.30 each.



No. 713 Midget Cultivator
For use in small beds and narrow rows. 3 inches wide. Overall
length 11 inches. 40c each.



"HANG-IT"

How often haven't you wanted to hang your tools up out of the way?

No springs

No springs to force, wear or pry open. Quickly in-

Quickly insert or remove handle, with one hand.
Holds mops.

Holds mops.
brooms. garden tools,
shovels either
handles of
wood or metal.
No home

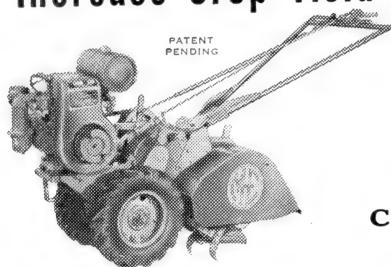
No home should be without several of these handy "HANG-ITS".

10c, postpaid.

All Tools Subject to 3% Michigan State Sales Tax and F.O.B. Grand Rapids. See Postal Rates, Page 3.



GUARANTEED to Increase Crop Yield



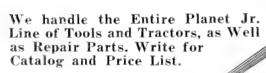
The purpose of Rotary Tillage is to mulch vegetation throughout the tilled depth. To make available more minerals and moisture for plant crop roots. To save time, labor and fuel—increasing crop yield and farm profits.

One of the most important reasons for Rotary Tillage is to put back into the soil those minerals that have been removed over a period of years. Here is a tool that will help the grower return his land to the status in which our forefathers found the soil when they migrated to this country.

CHOICE OF HORSEPOWER ON GARDEN MODEL

The M-E G-16 Rotary Garden Tiller, illustrated to left, is available Note the sturdy construction of the tillage unit—the heavy tines are dewith either 5 HP or 6 HP 4-cycle air-cooled power unit. Standard accessories are also available, including snowplow, bulldozer, sickle bar, and hiller-furrower combined. Power take-off models also availsigned to allow average field stones to pass through—unit lifts over larger able. Ask for descriptive circular. Prices gladly quoted upon request. stones.

PLANET JR. TOOLS





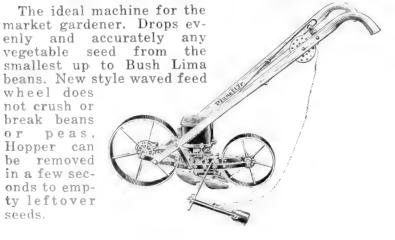
No. 13 Double Wheel Hoe

To those who like a double wheel cultivator we recommend this machine. The two wheels make the going more steady.

No. 300 Planet Jr. Seeder

enly and accurately any vegetable seed from the smallest up to Bush Lima beans. New style waved feed wheel does not crush or break beans peas. Hopper can be removed in a few seconds to empty leftover

seeds.



No. 219 Cultivator with Fertilizer Attachment

This handy machine answers the call for a light, inexpensive, practical tool for side-dressing growing crops. Small enough to go between 12-inch rows. It will handle nitrate and commercial fertilizers.

No. 18 Single Wheel Hoe

For cultivating small crops the No. 18 is just the thing; simple but very effective. Thousands of gardeners are them profitably.



Traction

Duster

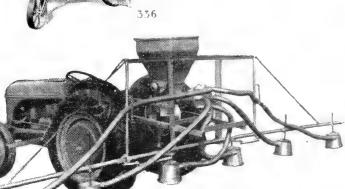
No. 421 SEPT-4 V. Two rows, two "V" type nozzles per row.

Self propelled tandem duster.

The Messinger Line of Dusters

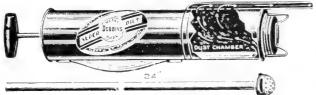


No. 336 SEp-4 V Self-Propelled Duster. With adjustable wheel guage.



No. 485 Tractor Mounted Dusters are furnished for most one plow tractors up to 8 rows. Shown is the model "R-Sr." with whirlpool nozzles. Also furnished with tree or drift tube and operator's platform.

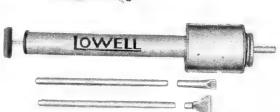
No. 132 Dobbins Hand Dust Gun. Ideal for all garden dusting.



Root Dusters

Hand Gun, C-3. Traction Dusters. 1- and 2-row. Power Dusters. All sizes.

Your Inquiries Solicited.



No. 461. Household Duster. 12 in. overall, $1\frac{1}{2}$ in. diameter. Ideal for use in exterminating pests in the home, henhouse, barn,

No. 465. Qt. apacity, 20" capacity, 20" over all, plus two 12" extwo 12" ex-tensions, 1½" d i a meter pump. Ideal for use in field and garden.



428A

with 4 Nozzles. two "V" nozzles

zles as shown.

No. 428A.

Wheelbarrow Di Also furnished

nozzles or two whirlpool noz-



No. 94G Lowell Streamer. Seal Tite Nu Top. Capacity 3½ gallons. 21 inches high. 24 inch, high pressure spray hose. 2 foot brass extension. All brass nozzle.



No. 46G Lowell Pennant. Seal Tite Nu Top. Capacity 4 gallons. 21 inches high, 27 inch high pressure spray hose, 2 foot brass extension. All brass nozzle.

No. 8 Dobbins De-Luxe Garden Sprayer. Tank 2-gal. cap. galv. steel, funnel fill top, 3 ft. 3/8 in. high pressure hose, 12-in. curved brass extension.

DOBBINS

No. 34G Dobbins Bighead Sprayers. Tank 3 ½ gal. capa-city. The The city. In Bighead provides a large 4" diameter opening

for filling, and permits positive cleaning. 30 in. of $\frac{3}{8}$ in. high pressure hose. 24 in. brass extension, with aphid angle noz-

OWELL

We also handle the Dobbins line of small sprayers.

of small sprayers.
Also Dobbins No.
200 2-row crop
dusters, Stauffer
Knapsack Duster.
No. 309 Lowell Thoro-spray
Sprayer. With Toggle switch..
No. 305 Lowell Thoro-spray Electric Paint

Sprayer. Inquiries solicited. All prices quoted f.o.b. Grand Rapids.

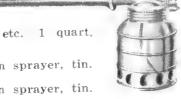
No. 206G. 1½" x13" pump. Adjustable 2-way nozzle. Heavy

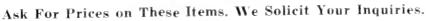
glass container, brass valves, etc. 1 quart. \$1.50 each.

No. 270 Premier. 1-qt. garden sprayer, tin.

OWELL

No. 265 Nu-Day. 1-pt. garden sprayer, tin.







Farm Fertilizers

Commercial fertilizers are those which are used for general farm purposes, and are composed of the three elements of plant food, namely Nitrogen, available Phosphoric Acid and Potash K²O and are mixed by the world's largest fertilizer manufacturers in the proper proportions, so as to give your soil the proper available plant food to produce a maximum crop. We handle large quantities of the various analyses every year and will ask that you consult us and get the right fertilizer for your specific needs. Prices will be quoted upon application.

Mixed Fertilizers. Standard analyses.

Nitrate of Soda Sulphate of Ammonia Super Phosphate Muriate of Potash Steamed Bone Meal Pulverized Sheep Manure Shredded Cattle Manure Lime
Manganese Sulphate
Aluminum Sulphate
Copper Sulphate
Ammonium Nitrate
Cyanamid
Zinc Sulphate
Magnesium
Iron Sulphate



Milorganite
is a natural
unadulterated organic
plant food. It
c on t a in s
more of the
"basic" fertilizer elements than

good old barnyard manure and is richer in the vital "trace elements" also. The effects on growth are long lasting, high in purity, non-burning, and it is easy to use. It is clean, dustless and free flowing. Ideal for lawns, trees, shrubbery and gardens.

25	lbs.	\$1.20	500	lbs.	 \$15.50
50	lbs.	2 .00	1000	lbs.	 29.00
100	lbs.	3.25	2000	lbs.	 55.00
		F.o.b. Grand			

KEM LIQUID PLANT FOOD. 4 ozs., 10c; 12 ozs., 25c; 1 qt., 50c; 1 gal., \$1.00.

HYPONEX PLANT FOOD grows superior plants in soil, sand or water (contains Vitamin B-1.) With Hyponex and water, plants grow luxuriantly, flower abundantly, and develop sturdy growth regardless of the poorness or sterility of the soil. In fact, with Hyponex they will grow and flourish in clean sand, cinders or barren earth. Hyponex is ideal for hydroponics the science of growing plants without soil. A teaspoonful makes a gallon of liquid plant food, which is enough for one watering of house plants in the average home. A 1-lb. can is sufficient to make 100 gallons. One of the advantages of Hyponex is that it makes a liquid plant food complete and balanced; yet because it is a powder it can be stored or transported easily and there is no spoilage, for it keeps indefinitely. 1-oz. pkt., 10c; 3-oz. can, 25c; 7-oz. can, 50c; 1-lb. can, \$1.00.



No. 14P Continuous Sprayer

Streamlined, solid copper tank; seamless brass pump 14 in. by 1½ in. Complete sprayer, highly polished and lacquered. Very attractive. Quart size \$4.25.

Insecticides and Seed Disinfectants



Antrol Ant Traps. Metal traps that contain two types of specially prepared material that attract and kill both grease and sweet eating ants. Each 15c.

Antrol Ready Filled Sets. These convenient sets contain four glass feeders ready filled with Antrol syrup. Safe around children and pets. Sets, each 39c.





Antrol Syrup Refills. For refilling "feeders." It kills both sweet and grease eating ants, either inside or outside the house. 4-oz. size, 25c.

Arsenate of Lead. For all leaf-eating insects. 1-lb. pkgs., 4-lb. bags, 48-lb. cartons.

Black Leaf 40. A solution of Nicotine Sulphate used to kill plant lice. 1-oz. bottles, 5-oz. bottles, 1-lb. bottles, 2-lb. bottles, 5-lb. cans, 10-lb. cans, and 50-lb. drums.

Black Leaf 155. 14% Nicotine. A prepared dry compound of nicotine for the control of codling moth and other insects. 3-lb. pkgs.

Bordeaux Mixture. Used in spraying for blight and fungous diseases. 1-lb. pkgs., 4-lb. bags, 48-lb. cartons.

Arasan. A seed disinfectant and protectant for Corn and vegetables, particularly Onions.



Tree Tanglefoot. For safeguarding trees and vines against climbing insect pests. Will remain sticky when fully exposed to the weather. 6-oz. size, 45c; 1-lb. size, 80c; 5-lb. size, \$3.75; 10-lb. size, \$7.00; 25-lb. size, \$15.00.

Calomel, "Merck." Used for Onion thrip, Potato scab, and neck rot on Gladiolus. A seed treatment for Cabbage and Cauliflower seed as well as field treatment.

Calcium Arsenate. Used in dusting or spraying Cabbage and Potato crops. 1-lb. pkgs., 4-lb. bags, 48-lb. cartons.

Insecticides and Seed Disinfectants — Cont.



Ceresan, New Improved. Seed disinfectant for Wheat, Oats, etc. 1-lb. cans, 4-lb. cans.

Corrosive Sublimate. For treating Potatoes and other plants before setting out. 1/4 lb., 1 lb., 25 lbs.

Cuprocide, Yellow (Red Copper Oxide). For seed treatment. Used in greenhouses to prevent damping off and black leg. 3-lb. bags only.



Cyanogas A Dust. Calcium Cyanide for killing all rodents. 1-lb. cans, 5-lb. cans.

Cyanogas G Fumigant. For greenhouse fumigation or general fumigation of all enclosed spaces. 4-oz. cans, 5-lb. cans, 25-lb. drums.

DDT. Dusts and liquids.

Dusting Sulphur. Used for crop dusting. Sold in 100-lb. bags or in bulk.

Ever Green Garden Spray. Retail prices: 1 oz., 35c; 6 ozs., \$1.15; 1 pt., \$2.45; 1 qt., \$4.10; 1 gal., to commercial growers, \$12.60.

Formaldehyde. Liquid mixed to prevent smut in Onions, Potato treatment, etc. Sold in your container or in 50-gal. drums; also in pt. bottles.

Krop-Saver No. 10 Pyrocide Dust. Very effective on Cucumber beetles, Squash bugs, etc.

Krop-Saver C-1 Dust. Tri-basic copper sulphate for blight control on vegetables.

Krop-Saver No. 5-C Dust. Pyrethrum and copper combination bug and blight control.

Krop-Saver No. 75 Dust. Recommended for Cabbage and Cauliflower worm control.

Paris Green. A very strong insecticide for all eating insects. ¼-lb. pkgs., and 1-lb. pkgs.



Red Arrow Spray. A concentrated rotenone spray in 1-oz., 4-oz., 1-pt., 1-qt., and 1-gal. bottles.

EYER

GREEN

Garden

SPRAY

ROOTONE



Rootone. The plant hormone powder is a root forming stimulant when applied to cuttings, seeds or bulbs. This powder gets its root forming activity from the synthetic plant hormones or growth substances which it contains, and is used on grass seeds, vegetable and flower seeds, bulbs of all kinds. Comes in various sizes.

Semesan. A seed disinfectant for surface-borne organisms as well as soil-borne fungus.

Semesan Bel. For treating Potatoes and certain flowering bulbs.

Semesan Jr. Used for the treatment of seed Corn.

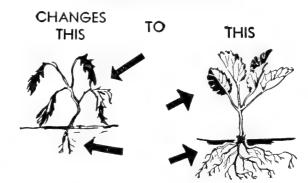


Slug Shot. An old reliable dusting powder for killing Cabbage worms, Potato bugs and other chewing insects.

Spergon. A seed protectant in powder form for treating seed before planting. Spergon assures better germination of the seed and produces healthy plants that give better yield. It is non-injurious to humans and is easy to apply to the seed.



Transplantone





Transplantone. For stronger roots. When plants are moved or transplanted many of the feeder roots are broken. The plant usually stops growing until it repairs or replaces these feeder roots. Loss of water causes wilting. Transplantone helps grow new roots and reduces loss of water so the plant starts growing again in a much shorter time.

WE RECOMMEND TRI-OGEN



The all-purpose spray for Rose plants. Insecticide, fungicide and plant stimulant all in one.

											rices
"E"	Kits	٠	٠			٠	٠		٠		\$1.35
"A"	Kits										2.25
"B"	Kits			٠				٠		۰	6.00
"C"	Kits						٠				9.00

Tobacco Dust. Finely ground. Sold in bulk, any quantity, or in 100-lb. bags.

Weatherproof Pencils, 10c each.

Garlanite Putty. In 1-gal. cans. Prices on application. Greenhouse Staples. The original Van Reyper points. 9/16 in. or 5/8 in. long. Per box of 1000, \$1.00.

Zinc Greenhouse Glazing Points. Per box 90c.

Corn Planters.

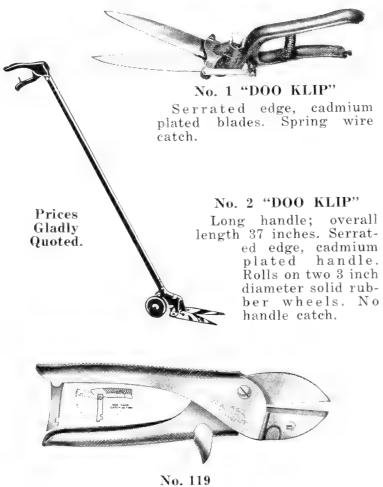
Corn Planters with Fertilizer Attachment.

Potato Planters.

Potato Planters with Conveying Tube.



"MIRACLE". Revolutionary new basic design makes it the easiest working shear ever. Blades cannot stick shut or spread out of alignment; cuts thinnest or toughest grass or weeds. Blades oil hardened and hollow ground. Red enameled handles. \$2.00.



8-inch Original "Snap Cut" finished in Chrome. \$2.25.

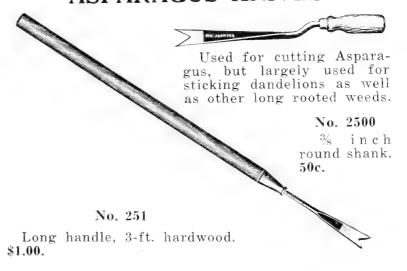




No. 4775

9-inch, Vineyard pattern, high quality steel blade which is renewable, ratchet lock nut, malleable iron handle half polished with blue lacquer. \$2.25.

ASPARAGUS KNIVES



THE ROSS ROOT FEEDER takes water and plant food RIGHT to the ROOTS where they do most good

Give your lawn and garden the professional care of Root-Zone Feeding—yet save time, trouble and expense. It's easy now, with the Ross Root Feeder. So many advantages in this superior new gardening tool

advantages in this superior new gardening tool.

ADDS VIGOR—Root-Zone feeding promotes deep, hardy root systems.

EFFECTIVE—Plant food and water go to Root Zone for greatest benefits.

SAFE—Ross Nutrient Cartridges can be safely applied to roots at all stages of applied.

ECONOMICAL—Ross cartridges contain growth-essentials in concentrated form. STOPS WASTE—No run-off loss of fer-

tilizer and water.

NO BURN—Sub-surface watering safe even at mid-day.

ADJUSTABLE-Flow can be controlled

to exact needs.
HANDY-Fits garden hose. Penetrates

ground easily.

DURABLE—Precision built for long ser-

ground easily.

DURABLE—Precision built for long service. Guaranteed.

Transplanting flowers? Transplant them clean and dry—then apply water at rootzone when transplanting is completed. Planting hedge? Or some trees? Let the Ross Root Feeder insure a good start. Want prize blooms? Ross Nutrient Cartridges stimulate extra development. Dry spells ahead? Root-Zone Watering helps save lawns and gardens.

save lawns and gardens.

Price, with 12 cartridges, \$4.98.

One dozen cartridges come with each Root Feeder. Extra cartridges \$1,00 per dozen.



All Prices Subject to Change Without Notice and F. O. B. Grand Rapids.



YOUR OWN ODORLESS FERTILIZER FACTORY

Humus From Compost in 2 to 6 Weeks

Now you can make rich, compost fertilizer from even garbage, WITHOUT ODOR, in a tiny back yard space, in 2 to 6 weeks! Just gather waste—table scraps—leaves—grass—garden rubbish, etc., even sawdust and soot and treat with ACTIVO. Easy. Low cost. No. 7 size treats up to 1,700 lbs.

compost.

ACTIVO also adds life to jaded soils—activates and conditions when applied directly. Use it to "stretch" and convert chemical fertilizer, and to reduce odor in outdoor toilets and convert waste into easily handled ash-like humus. The No. 7 and No. 25 are by far the most popular sizes. The \$5.00 value blueprint plans for Composter Cabinet (with specifications and list of materials) are given FREE only with the No. 25 size Activo. Not free with any other size. No exceptions. With the No. 50 size, they cost \$1.00 extra. With all other sizes the price is \$5.00. If you only want the plans to build Composter Cabinet, the charge will be \$5.00. These plans will be mailed to you direct from the manufacturers upon recient of your plans will be mailed to you direct from the manufacturers upon reciept of your order.

PRICES

No.	2	size	up to 450 lbs. waste\$1.00,	postpaid
No.	7	size	for 1700 lbs. waste 2.00,	postpaid
No.	25	size	for 3½ ton waste	postpaid
No.	50	size	e for 6½ ton waste 9.95	charges
				collect



Sudbury Soil Test Kit

It's first aid to amateurs for finer lawns, flowers, vegetables-the fancier's guide to prize-winning blooms. Shows how to give your soil the right kinds and amounts of fertilizers for all your flowers, vegetables, etc. (125 listed). Also whether lime is needed and how much. Easy to use, intensely interesting, no knowledge of chemistry needed. Ten-minute test tells more than a lifetime of gardening. SPECIAL—complete equipment, instructions

and solutions for 20 tests, for nitrogen, phosphorus, potash, acidity.

Other Models \$4.75 to \$22.50

Waterproof Work Clothing

QUALITY—United States Rubber Company is the oldest and largest manufacturer of rubber surface Work Clothing in the world. The name "U. S. Raynster" has long stood for the best in the field.

U. S. Raynster Work Clothing is full cut for comfort, allowing full body freedom; the seams are sealed by a special and exclusive process, and every special feature which workmen appreciate has been included in Raynster design.

The rubber compounds used to surface U.S. Raynsters are lightweight, resistant to abrasion, oil, grease, fats, acids, alkalies and other common enemies of rubber. The compounds are tested in both laboratory and field to assure finest possible service results under severe and strenuous conditions of wear. Only finest quality fabrics are used.

The U.S. Raynster label on a work raincoat is your guarantee that the garment is backed by 104 years of continuous manufacturing experience.

WILBUR COAT-MR130. A 100% waterproof rubber surface Raynster intended for general service, industrial and agricultural wear. An outstanding work coat in 3 lengths, with corduroy edge collar-ventilated double back for comfort in any weather-dull finish black rubber on white twill—three-piece body—single breasted—square shoulders—slot and buckle fasteners—full corded reinforced square pockets with flaps—cord-uroy tipped collar—eyelet ventilation under arms—vent in shirt (except MR620) —ventilated double back. Length 49 inches all sizes. Sizes

SKIPPER SUIT. A 100% waterproof rubber surface Raynster suit for any job requiring full protection.

Jacket—MG140. Dull finish black rubber on white twill—two-piece body—inside fly front single breasted—square shoulders—fastened with four ball and socket fasteners—standing corduroy tip collar—plain sleeves—eyelet ventilation under arms—length 30 inches all sizes. Sizes: small, medium large.

Overalls-MH140. Dull finish black rubber on white twill—bib front—shoulder straps fastened to top of bib with adjustable overall buckles and tack buttons-corded hem around bib and waist-specially designed reinforced crotch construction-length 29 inches inseam all sizes. Sizes: small, medium, large.

SQUAM HAT-H630. Dull finish black rubber on white twill—six-piece crown sewed and strapped on inside—sweatband—reinforced brim sewed with continuous stitching--one-quarter sizes from 6½ to 7¾.

Added protection for the man who LEGGINS. spends long hours in the rain. Lightweight 100% waterproof construction.

L-110—S. C. Leggins—Dull finish black rubber on white twill — one-piece Leggin — adjustable foot strap-strap at top of each Leggin with adjustable (ball and socket) loop at top for fastening to belt—no waist strap. Sizes: small medium, large—inside length 22 inches—23 inches graduated $-\frac{1}{2}$ inch gum binding attached around top and bottom edges of each Leggin.

MEDIUM WASH APRON—A100. Double-coated black rubber on heavy drill-one grommet in each top corner of bib and each side, reinforced with stays. All edges hemmed and apron completely vulcanized after making—size 33 by 47 inches-weight 2½ lbs.

MAROON APRON-A119. Double coated maroon rubber on sheeting-finished raw edge-one grommet in each top corner of bib and each side, reinforced with stays—size 34 by 45 inches weight 1½ lbs.

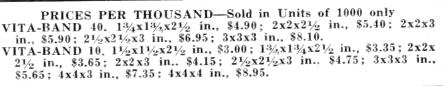
Prices Quoted on Application

GIVE CROPS A HEAD START WITH SELF FEEDING VITA BANDS



VITA-BAND 40: Growers are reporting outstanding results in vigorous well-balanced growth. Exclusive nutrient treatment affords a liberal supply of balanced plant food. Transplanting shock eliminated, saving 1 to 3 weeks set-back. Sturdy fibre resin construction maintains best moisture conditions with watering frequency cut 50%. Save space and growing time. Quick set-up and rapid removal.

VITA-BAND 10: Designed for growing periods of 8 to 10 weeks. A low-cost nutrient treated band especially good for annuals and vegetables. Produces growing results similar to Vita-Band 40.







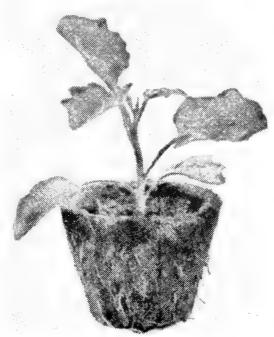


FERTO POTS

For earlier, better crops and bigger profits.

FERTO-POTS and more produce crops abundant yields, and are extensive-ly used by the most successful gardeners

FERTO-POTS are constructed of manure and fer-tilizer in the correct proportions for best plant growth and for holding the moisture at roots of the plants. The plants are not replants are not removed from the pots when they are set out. Simple are set out. ly set pot and all in the ground and the roots will grow right through the pot which slowly breaks down, fur-



nishing valuable
plant food. Roots are not disturbed and plants not checked.

Carton of 100 No. 3 (3 inch), \$3.00, not prepaid.

Carton of 250 No. 3 (3 inch), \$5.50, not prepaid.

Cyclone Seed Sower

Broadcasts Evenly—Saves Seed—Saves Labor
Uneven seeding is wasteful. The Cylone will sow many
acres per hour, any amount per acre. Does the work quickly and saves labor.

Many hundred thousand farmers in America, Canada, Europe and other countries have relied on it for sowing Clover, Timothy, Alfalfa, Lespedeza, Sudan Grass, Oats. Wheat, or any other seed that is sown broadcast.



Construction—Its well known double feed insures a uniform flow of seed. Sloped feed board keeps hopper properly filled. Feed adjustment is automatic and starts or stops flow of seed instantly. Distributing wheel scatters seed evenly—throws equal amounts to equal distances on each side of operator. Price: \$3.75, f. o. b. Grand ater. P Rapids.

THE SECTIONAL TUBE STYLE "HORN" SEED SOWER

HAS PATENTED BRASS SEED GAUGE

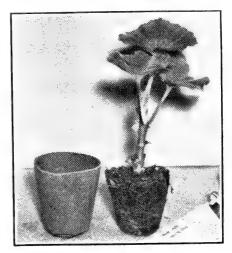
Adjustable to sow any amount per acre. Used for sowing Clover, Timothy, Lespedeza, Alfalfa and all other small smooth seeds. Is popular, low priced and has a large sale. Price: \$1.35, f. o. b. Grand Rapids.



Bird Red and Green POTS

RED: For shipping only. Not recommended for growing. Lightweight and sturdily made to protect rootball from breakageinner wax coating prevents drying out. A "must" to preserve the top quality of your plants in transit.

GREEN: Sturdy fibre resinous material for growing and shipping plants.



PRICES PER THOUSAND—Sold in Units of 1000 only REP. 2 in., \$6.85; 2½ in., \$6.85; 2½ in., \$6.90; 3 in., \$7.30; 3½ in., \$9.65; 4 in., \$11.55; 5 in., \$14.15; 6 in., \$17.65.

GREEN. 2 in., \$10.45; $2\frac{1}{4}$ in., \$10.80; $2\frac{1}{2}$ in., \$11.50; 3 in., \$13.15; $3\frac{1}{2}$ in., \$17.00; 4 in., \$20.30; 5 in., \$27.60;

Wood Veneer Plant Bands

Used by the largest growers of vegetable plants, perennial plants, Carnations, Snapdragons and Stocks, for transplanting to the greenhouse or out-of-doors. Packed 1000 to a carplants,

	Shipping Weight												Per 1000						1000		
$1\frac{3}{4} \times 1\frac{3}{4} \times 2\frac{1}{2}$	in.		33	lbs.																. 3	\$5.95
$\frac{2}{2}$ x2 x2 $\frac{1}{2}$	in.																				
$2\frac{1}{2}\frac{1}{2}x2\frac{1}{2}x2\frac{1}{2}$	in.		40	lbs.					٠					 ٠							6.50
$2 \times 2 \times 3$	in.		40	lbs.										 ٠							6.60
$2\frac{1}{2}$ x2\frac{1}{2}x3	in.		45	lbs.								٠.	۰								6.80
3 x3 x3	in.	**																			7.55
4 x4 x3	in.																				8.15
$3 \times 3 \times 4$	in.																				8.15
$4 \times 4 \times 4$	in.		65	lbs.									٠	 ٠					٠.	٠	9.20

These bands are stapled, and are sold in units of 1000 only. These bands are stapled, and are sold in units of 1000 only. The above prices are quoted f. o. b. Grand Rapids, based on existing express rates. Those ** is the most popular size, which will be carried in stock. Other sizes can be obtained on order. All prices subject to change without notice, and for shipment direct from factory, we will quote special prices, f. o. b. factory.

WOOD LABELS

			For	Marking	Plants			
Plain,	Not	Printed				50	100	1000
$5/_{\mathrm{X}}$ X4	in.					.\$0.25	\$0.45	\$3.25
$5\zeta x5$	in.					30	.50	3.50
5/s x 6	in.					35	.55	4.25
56 x 3 1/5	in.	wired				35	.60	4.50

Above prices are subject to change without notice and are quoted f. o. b. Grand Rapids. Postage will be extra.

VIGORO

Prices

Request

. no unsightliness following garden dusting! A few strokes of

the exclusive EndoPest dust gun envelops your plants in an al-

most-invisible protecting film . . .

gives you control over most chew-

ing insects, sucking insects and fungus diseases! Use with confi-

dence on edible fruits and vege-

tables. We have refill cartridges

MADE BY SWIFT

MAKERS OF VIGORO

End-O-Pest Prices

INSECTICIDES

Krop Saver No. 25DE is 25% DDT concentrate for use on the farm or home as a spray in diluted form. Will kill flies, fleas, mosquitoes, roaches, silverfish and crickets; also used for a cattle spray or dip. It is economical, long lasting, odorless and non-inflammable.

POISON GRAIN

Prepared by the U.S. Department of the Interior, Fish and Wildlife Service, Pocatello Supply Depot, Pocatello, Idaho, for the control of field mice and other rodents in orchards. This is grain treated with strychnine, and is put up in 10- and 25-lb. bags. Prices quoted on request.



EndoWeed

Why? Because EndoWeed is a new and improved selective weed killer, carefully prepared to kill ugly lawn weeds without harming ordinary grass or affecting the soil! EndoWeed kills dandelions, chickweed, plantain and over 50 other weeds-roots and all. 8 ounces treats 2000 sq. ft. of lawn.

PRESENTED BY SWIFT MAKERS OF VIGORO

EndoWeed Prices

/2	pint liq	uid								٠							7	Dutana
L	qt. liqui	d						٠	٠					٠		٠		Prices
L	gallon 1	iquid								٠		٠						on
ΞN	DoWEE	D SI	Ι)	E	9	3	P	ŀ	₹.	A	3	Y	E	F	₹	1	Request

WEED **KILLERS**

DU PONT AMMATE WEED KILLER

A crystalline material containing ammonium sulfamate as its active ingredient. It has proved to be outstandingly successful for the control of poison ivy, poison oak, ragweed, buckhorn, plantain and certain other weeds.

2-4 DOW WEED KILLER

(In powder form.) Kills many weeds without in-

juring the grass. It is easy to mix with water to the desired strength.

4 oz. pkt. oz. refill

2 lb. pkg. ..

WEED-NO-MORE MAGIC WEED KILLER

for the guns.

10 oz. gun

A Sherwin-Williams product containing 2, 4-D. It kills the ugly weeds, but won't harm common lawn grasses.

WEEDONE

"The internal weed killer". A 2, 4-D concentration that will kill most weeds without injuring valuable grasses. Simply dilute 1 qt. in 25 gallons of water and spray the leaves.

GRASS KILLERS



RIDZ CRAB GRASS KILLER

A highly selective substance that kills seedling mature crab grass without harming the sirable lawn grasses. When soaked into the soil, it retards the germination of the remaining crab grass seed.

ZOTOX CRAB GRASS KILLER

Crab grass is America's No. 1 annual lawn weed. It doesn't appear until August and grows very rapidly, reseeding itself for another year. ZOTOX will kill this weed as well as the seed that has dropped without sterilizing the soil and the lawn may be reseeded and fertilized in three or four days after it has been applied.

COSTS 3 CENTS TO PAINT 25 SQ. FT. CARBOLA-DDT

Insect-Killing and Germ-Killing White Paint

A FLY KILLER AND DISINFECTANT, TOO

Why waste money on expensive DDT mixtures to kill flies? Carbola-DDT (2% DDT) is guaranteed to kill them at low cost. Proven in thousands of tests on farms by county agents. Natural adhe-siveness of our special mineral carrier causes Carbola-DDT to stick to wall, causes Carbola-DDT to stick to wall, ceilings. This gives you the residual, long-lasting DDT recommended by authorities. Continues to kill flies, mosquitoes, spiders for months. Simply mix Carbola-DDT powder in water and apply with DDT powder in water and apply with brush or sprayer. Dries white. Costs ap-proximately 3 cents to treat 25 sq. ft. No oil, no fire risk. Use in cow barns (cuts need for cow spray 50%), poultry houses,

rabbitries, pigeon lofts, outdoor toilets. And paint your cellar and dog house.

DESTROYS DISEASE GERMS, ODORS

Carbola-DDT also contains a disinfect-ant which kills germs of disease that afflict cows, poultry and other livestock. Used for a quarter of a century as Carbola, the disinfecting white paint, by agricul-tural colleges, hatcheries and thousands of farmers. Now it does three jobs for you in one easy operation: (1) Kills flies (2) Destroys disease germs (3) Meets whitewash sanitation requirements of Board of Health. Used also as a dry dip, deodorant and soil treatment. deodorant and soil treatment.

Ask dealer for economical 50 lb. bag

1 lb., 30c; 5 lbs., 85c; 10 lbs., \$1.35; 25 lbs., \$3.00; 50 lbs., \$5.50.

Write for handy egg record chart.

CARBOLA CHEMICAL CO., Inc. Established 1916 Natural Bridge 100, N. Y.

Electric Tying Machine



The Felins Electric Tying machine is a great time saver. Will handle 6- to 16-ply cotton twine as well as No. 13 and No. 17 braid. Is equipped with a 1/4 h.p. electric motor, 110 volts. Top speed 45 bunches per minute.

FELINS FOOT POWER MACHINE

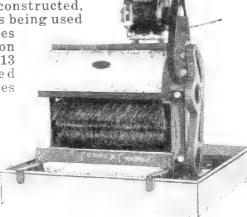
Like the electric tyer this machine is well constructed, dual roller bearings being used where needed. Ties

where needed. Ties 6- to 16-ply cotton twine and No. 13 braid. Illustrated circular and prices on request.

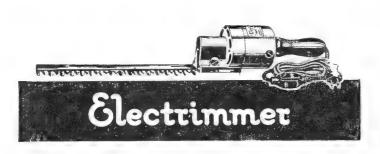
Felins Torrent Bunch Washer.

Felins Root Crop Washer.

Prices quoted on request.



Felins Torrent Bunch Washer



A Real Tool for a Real Job!

Built to give enduring service. Has ¼ H.P. universal motor with die-cast aluminum housing and handy thumb-operated toggle switch. Special alloy gears. Cutter blade 12 inches long, is made of finest crucible steel. Price includes 6 feet of best rubber covered cord. \$29.95 each. Price subject to change.

Atkins Silver Steel Saws

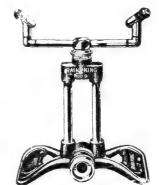
For orchard pruning. There are many good numbers that the fruit men like, but they have been hard to get; however, we'll try to keep them in stock if and when they are available. Ask us, and we'll tell you what we have. Prices will be quoted upon application.

C-A WOOD PRESERVER

(Carbolinium America.) It is the ideal product to use on posts, poles, ties, sills, joists, floors, silos, hog houses, barns and other wood that is exposed to decay. It will kill chicken mites and fowl ticks. One application should last from one to three years. \$1.75 per gal., f. o. b. Grand Rapids.

RAIN KING Sprinkler Model "H"

Chrome plated. Adjustable for coarse or medium shower. Can be used for revolving or stationary sprinkling by simply turning lock wheel. 11¼ inches tall; 9¼ inches from nozzle to nozzle. \$6.25. Shipping weight 5 lbs.



RAIN KING SPRINKLER Model "D"

Can be adjusted to operate slow or fast. Will operate on any water pressure. \$4.50. Shipping weight 4 lbs.



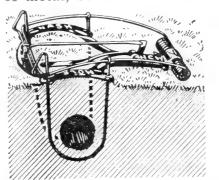
RAIN KING SPRINKLER Model "K"

Automatic, new sensational sprinkler that you can set instantly to sprinkle any size circle 5 to 50 feet, by simply turning the button on top of the sprinkler. \$7.25. Shipping weight 5 lbs.

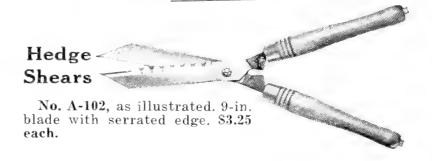
Nash Choker Loop Mole Trap The Only Trap That Always Catches The Mole

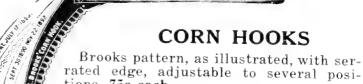
In All Kinds of Ground

Both the choker wires are made of a single piece of metal, bent to the desired form, so that they are



held perfectly in place, not depending on numerous joints. The springs which operate the trap are of one piece of best Gamma spring steel, while the trap as a whole is strong enough so that no clods, stones, sticks or anything of that kind prevents its perfect operation. Price: \$2.50 each.





No. 119. 8-inch "Snap Cut" Hand Pruning Shear.

No. 19. 8-inch "Snap Cut" Hand Pruning Shear.

No. 5408. 24-inch Hand Pruning Shear.

Also a 12-foot Sectional Pruning Shear.

Ask for Prices



Grand Rapids

RAT KILLERS KILOBALI



DO YOUR PART-

to get rid of these thieves that waste the food so vitally needed throughout the world today. Nobody likes a rat. Rats carry disease. Rats and mice do almost two hundred million dollars' damage each year. Let's get rid of thieves.

16 ozs., \$1.00, f. o. b. Grand Rapids.

Ant-U-Rat. Contains 20% alphanapthyl thiourea. May be mixed in baits, or sprinkled in runways diluted in water. 11/2-oz. pkt., 65c; 4-oz. pkt., \$1.50; 8-oz. pkt., \$2.50.

Mir-A-Kil. The Miracle Rodenticide Rat Killer. Contains 25% Antu,

and will kill on contact, dusting in runways or burrows; in water as a drink, on bait that rats will eat. 3-oz. shaker-top can, \$1.00.

Snarol. Kills snails, slugs, cutworms, sowbugs, earwigs. Spread around the plants late in the day after the ground has been watered. 1 lb., 35c; 2½ lbs., 75c, f.o.b. Grand Rapids.



VIMLITE

The flexible health glass. It transmits healthful sun rays. An all-purpose plastic glazing-flexible, unbreakable, reliable. Easy to install for poultry houses, plants, hotbed sashes, cold frames, etc. 36 inches wide. 47c per running foot; 50-ft. rolls, \$14.75; 100-ft. rolls \$42.00. Sample mailed upon request.

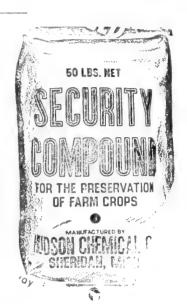
Money Back Guarantee



DOGZOFF keeps dogs and other animals away from places they are not wanted. Harmless. Cannot injure vegetation. Non-poisonous. Non-inflammable. You must be satisfied or money will be refunded. Bottle 60c.

Security Compound

Prevents spontaneous combustion, molding, mildewing, rotting, spoilage in new hay, grain, beans, corn, ground feed, shredded fodder. It is cheap insurance as it sweetens the mass and prevents fermentation and souring. It is beneficial to your cattle, sheep, hogs, horses and fowl. Write for prices.



Soil Disinfectants

Chlorpicrin (Tear Gas). Has long been known as the best means of disinfecting soil for disease and nematodes that are in the soil.

Larvacide is the trade name for high-test Chlorpicrin, manufactured especially for soil treatment and food product fumigation. LARVACIDE is a heavy, colorless liquid (or with yellowish tinge) which volatilizes (gasifies) readily into a tear gas. Applied under soil surface as a liquid, LARVACIDE volatilizes and then spreads through the soil mass. Completely volatile, it leaves no harmful residue. Ask us about this product for disinfecting your soil and the method of doing it.

When Insects INVADE

Have a Bug Bomb **Always** Handy

The Bug Bomb is SAFER, clean, fast. Press with one finger. An atomized mist does the rest. A



little goes a long way.

Each, f.o.b. Grand Rapids. Order yours today.



Write the name of your plant on label and insert it into the bottle.

The tube insert is used for recording place of purchase, color, dates of planting, blooming, etc.

Price: \$2.50 per doz., including labels and data strips. 10% off in gross lots. F.o.b. Grand Rapids.

Germãco

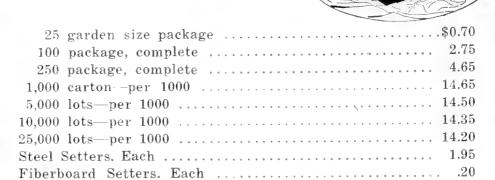
or Plant Protectors











Shipped Prepaid in Michigan. We do not split packages of Hotkaps.

HOT TENTS

Hot Tents are a product of "Germaco Hotkaps," to give the user a larger area to cover individual plants. Weight 70 lbs. per thousand.

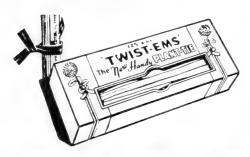
Per 1000 Hot Tents													. \$	24.00
Hot Tent Setter	 				 ٠				 					2.50



Weight 120 lbs. per thousand.	
Per 1000 Super Hot Tents	
Super Hot Tent Setter	

F.o.b. Grand Rapids





%WIST-EMS′

Home garden package for tying up anything you grow.

New package of 50 Twist-ems, 8-inch ...\$0.15 As illustrated at left.

For commercial growers, used in tying Carrots, Beets, Onions, Celery and other produce, for market. "A twist of the bunch does the trick."



and WINTER KILL

SPRA-SHIELD protects plants with a dense, hard, laminated coating, applied with a garden sprayer. Plants so protected are seldom molested by cottontail rabbits, mice, rats, shrews and other rodents. One application usually sufficient.

SPRA-SHIELD increases plant resistance to winterkill, sealing in moisture, and reflecting unseasonable

SPRA-SHIELD is beyond comparison with makeshift resinous mixtures. It requires no special tools, no wrappers, no spring removal. It is ready-mixed, non-injurious, non-poisonous. Saves time, saves work, saves precious plants and trees.

1 qt., \$1.75; 1 gal., \$3.90; 5 gals., \$16.00. F. o. b. Grand Rapids

Bundle Per M M of 250 \mathbf{M} \mathbf{M} \mathbf{M} 7-inch\$0.40 \$1.50 \$1.45 \$1.39 \$1.33 \$1.27 per 10008-inch .50 1.71 1.65 1.591.521.46 per 1000 12-inch .75 2.56 2.48 2.38 2 29 2.19 per 1000 16-inch 3.42 3.30 1.003.17 3.05 2.92 per 1000

New Weatherized TRELLIS NETTING Ideal Support for SWEET PEAS, GARDEN PEAS, POLE BEANS, CUCUMBERS, TOMATOES

Grows finer, larger flowers and vegetables. Hung with

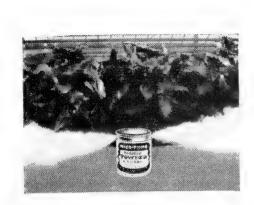
ease in 5 minutes; no fuss or bother. Use instead of string or wire. (Wire in sun burns delicate tendrils.) Doesn't rot like string—lasts several seasons. No. 2 Size, 60x96 in. 85c, postpaid

RUBBER BANDS

Rubber bands are again in good supply and the quality is better than pre-war. We have all the popular sizes in stock. No. 8, No. 10, No. 12, also heavier bands in larger sizes. Price: \$1.00 per lb., f.o.b., Grand Rapids.

Prices subject to change without notice.

FUMIGATORS



NICOFUME PRESSURE FUMIGATORS For Greenhouses

1 lb. size, single cans 80c; 6 cans \$4.25; 1 doz. \$8.35. ½ lb. size, single cans 50c; 6 cans \$2.50; 1 doz. \$4.80. Mailable, but postage will be extra.



BENZOFUME PRESSURE FUMIGATORS

An efficient and economical method of controlling greenhouse RED SPIDERS in Rose ranges, also in Carnations, Chrysanthe-

mums and many other crops.

1 lb. size, single cans 50c; 6 cans \$2.90; 1 doz. \$5.50. ½ lb. size, single cans 30c; 6 cans \$1.75; 1 doz. \$3.20. Mailable, but postage will be extra.



BLACK LEAF MOSQUITO FUMER

Designed especially to kill biting mosquitos-to let you enjoy outdoor evenings, picnics and camping trips. They are convenient to use and effective. Protected by a sturdy insulated can, your comfort and protection are given special thought; no "handling" of chemicals required. This compounded powder produces a "smoke aerosol" which penetrates the hiding places promptly then disperses. Lighters are attached to the bottom of each package. Price, 45c each.

THESE CAN BE MAILED—POSTAGE WILL BE EXTRA





Vanes illustrated are all-metal and finished in weather-proof black to silhouette against the sky. Size: 40 in. high, 30 in. wide. Includes direction letters and Universal direction letters and Universal Base—\$24.50. Other clever new de-

signs available in a smaller size-\$13.50.



cludes unusual designs for every home, lodge or summer cottage. Signs that attach to tree, post or side of house-lawn signs-and wall type markers for any flat surface.

Signs are cast aluminum with leadcoated nameplate and handwrought iron bar. Swedish iron finish highlights artistic ornafinish highlights artistic orna-ments. Lettering 20c extra per character or numeral.

You'll also find many attractive new WHITEHALL house signs in our display-including both large and small sizes. Prices from \$6.50.



WHITEHALL Bell Bracket "Town Crier"--\$13.50.

A cheery tinkle announces your guests-with this charming House Bell.

Handsome bronze bell; metal bracket; cast aluminum ornament highlighted by Swedish Iron finish. Approx. 12 in. high, 12 in. long.



"SOURDOUGH"

Lawn Sign—by driveway or up near house. Metal pole holds sign firmly in place. \$7.50. Approx. 40" high, 12" long.

POSTAGE WILL BE EXTRA—SUBJECT TO THE 3% MICHIGAN STATE SALES TAX

PLANTER'S GUIDE

A vital question that is frequently asked. How large is an acre of land? Let's answer it right here.

5 yards by 968 yards. 4840 square yards. 60 feet by 726 feet. 110 feet by 396 feet. 300 feet by 145.2 feet. 43,560 square feet. From the above figures, you can figure any size piece of land.

Variety	Seed for 50 Ft.	Seed for 1 Acre Lb.	Rows Apart Feet	Plants Apart in Rows Inches	Planting Depth Inches	Days to Yield
Asparagus	1/2 oz. 30 plants		21/2	20	6	2 yrs.
Beans, Bush	4 ozs.	60 to 75	2 to $2\frac{1}{2}$	3 to 4	$1\frac{1}{2}$	50 to 70
Beans, Pole	4 ozs.	30 to 35	3 to 4	9 (or hills)	11/2	65 to 80
Lima Beans, Bush	4 ozs.	30 to 50	$2 \text{ to } 2\frac{1}{2}$	3 to 4	11/2	65 to 75
Lima Beans, Pole	4 ozs.	30 to 40	3 to 4	9 (or hills)	$1\frac{1}{2}$	80 to 90
Beet	1/2 oz.	4 to 6	$1\frac{1}{2}$ to 2	3 to 4	1/2	60 to 75
	$1/_{2}$ oz.		2	15	1/2	50 and on
Swiss Chard	1 pkt.		2	18	ĺ⁄Δ	70 to 80
_	1 pkt.	1/4 1/4 1/4	$\frac{1}{2}$	18	ĺ⁄Δ	70 and on
Brussels Sprouts	1 pkt.	1/4	2	12	i_{A}	65 to 75
Cabbage, Early	1 pkt.	1/.	2	18	$1\frac{7}{4}$	80 to 100
Cabbage, Late	1 pkt.	2	2	12	$1\frac{7}{4}$	75 to 85
Chinese Cabbage	1 pkt.	2 to 3	11/2	3	$i\overline{\lambda}_{A}$	60 to 75
Carrot	1 pkt. 1 pkt.		2	18	174	55 to 65
Cauliflower	1 pkt.	1/4	2	4	1%	90 to 120
Celeriac	1 pkt.	1/4	2 to 3	5	1/4 1/8 1/8	120 to 150
Celery	1 pkt. 1 pkt.	, ,	21/2	2.4	1/4	90 and on
Collards		8 to 10	21/2	9	1	70 to 80
Sweet Corn, Early	1 oz.	8 to 10	3	12	ī	80 to 95
Corn, Main Crop	1 oz.	2	4	24	3/4	60 to 70
Cucumber	1 pkt.	_	3	30	1/2	70 to 85
Egg Plant	1 pkt.	1/ ₄ 4 to 5	11/2	9	1/4	70 to 80
Endive	1 pkt.	4 to 5	21/2	24	1/4	70 to 80
Kale	1 pkt. 1 pkt.	4 to 5	272	8	1/2 1/4 1/4 1/4	55 to 65
Kohl-rabi		3 to 4	11/2	6		120 to 150
Leek	l pkt.	3 10 4	2	12		45 to 50
Lettuce, Leaf	1 pkt.	3	2	12	1/4	50 to 70
Lettuce, Head	l pkt. l pkt.	3 to 4	5	48	1 1	80 to 100
Muskmelon	pkt.	4	2	9	1/4	60 to 75
Mustard	1/2 04.	8	2	15	1	50 to 60
Okra	1 pkt.	3 to 4	11/2	3 to 4	1/2	90 to 100
Onion, Seed	1 pkt.	4	11/2	4	1/4	85 to 100
Parsley	1 pkt.	4	11/2	4	1/2	80 to 100
Parsnip	1/2 lb.	90 to 180	2 to 3	1 to 2	1	60 to 80
Pepper	1 pkt.	1/4	21/2	24		65 to 80
Pumpkin		3 to 4	8	60	1	110 to 130
Radish	1 pkt.	10 to 12	l i	1 to 2		25 and on
Rhubarb	10 plants	2 to 3 for	4	48	1/2	2 to 3 yrs.
Knubarb	10 plants	plants	1		/4	
Salaifer	1 pkt.		11/2	2	1/4	140 to 180
Salsify	1 pkt.	15 to 25	11/2	6	1/4 3/4	40 to 50
Spinach, N. Z	1 pkt.	1 /	3	20	1	70 to 80
	1 pkt.	6	4	36	1	55 to 65
Squash, Bush	1 pkt.	4	6	60	l i	65 to 120
Tomato	1 pkt.	1/4	3 to 4	36	1/2	75 to 90
Turnip	l pkt.	2 to 3	11/2	4 to 6	1/4	50 to 80
Rutabaga	1 pkt.	1 to 2	2	6	1/2 1/4 1/4 3/4	80 to 90
Watermelon		3 to 4	8	96	3/4	75 to 95
AN QUELINICION		1 3 10 7	. 0	, , , ,	1 /4	,

NUMBER OF PLANTS TO THE ACRE AT GIVEN DISTANCES

Distance apart	No. plants	Distance apart	No. plants 1	Distance apart	No. plants
12 x 1 in	522,720			36 x 36 in	4,840
12 x 3 in				42 x 12 in	
12 x 12 in			34,848	42 x 24 in	
16 x 1 in			17,424	42 x 36 in	
18 x 1 in		30 x 16 in	13,068	48 x 12 in	
18 x 3 in		30 x 20 in	10,454	48 x 18 in	7,790
18 x 12 in		30 x 24 in	8,712	48 x 24 in	5,445
18 x 18 in	19,360	30 x 30 in	6,970	48 x 30 in	4,356
20 x 1 in	313,635	36 x 3 in	58,080	48 x 36 in	
20 x 20 in	-		14,520	48 x 48 in	2,723
24 x 1 in	261,360	36 x 18 in	9,680	60 x 36 in	2,901
24 x 18 in	15,520	36 x 24 in	7,260	60 x 48 in	2,178

Approximate number of feet of row per acre at given distances:

Distance between rows: 18 inches 24 inches 30 inches 36 inches 42 inches 48 inches Feet of row: 29,010 21,758 17,427 14,526 12,439 10,853

1949 PLEASE USE THIS ORDER SHEET

GRAND RAPIDS GROWERS, Inc.

Grand Rapids, Michigan

Post Offic	:e				
Street, P.	O. Box Delivery				
Express or	(If Di	fferent	Forward Goods		••••
Freight Of	fice C from	P. O. J	Forward Goods (Parcel Post, Expr	by ess, Freight or Boo	at)
AMO	UNT ENCI	_OSED	Contemplate your seed purchases early and take adfollowing discounts on Garden Seeds only. Positivel allowed after April 1st.	vantage of the y no discounts	
Money Ord	der \$		5% DISCOUNT—except on Peas, Beans and Cor	'n	
Draft or C	heck - \$		If your order amounts to \$1.00 10% DISCOUNT—except on Peas, Beans and Cor If your order amounts to \$5.00	or more.	
Postage St	amps - \$		This discount applies on spring orders of GARDEN SEEDS	only, if ordered	
Cash	\$		before APRIL 1st. Orders received after April 1st are no count. Michigan State sales tax will be charged where ap All other items are NET CASH as quoted. Money m all orders. Discounts do not apply on Canadian order be remitted in U.S. funds.	ust accompany	
More O	rder Blank /	s will be sent u Make Money Or	ipon request. Always write letters on a separate sheet rders or Checks payable to Grand Rapids Growers, Inc.	from your order.	,
All of our have full re and farming more than	r seeds are t dress at any g depends lo the amount	ested, and we gud time if you are argely upon cultiv actually paid for	arantee the vitality and purity to the full amount of the purcha not satisfied with the results, but even with our quality seeds, vation, soil and weather conditions, therefore in no case can the seeds.	se price, and you success in garder we be held liable	car ing for
Do Not Write In This Space	Quantity		NAMES OF ARTICLES WANTED	Price	
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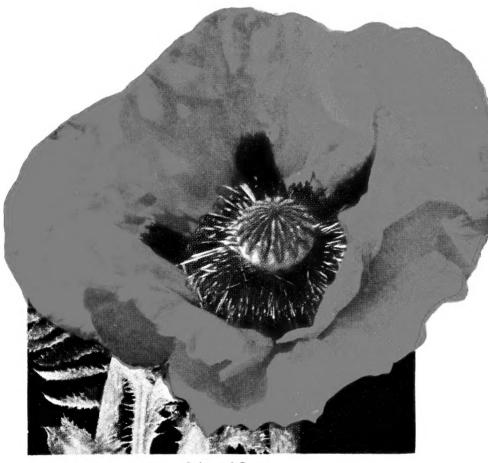
ORDER SHEET — Continued

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NAME	POSTOFFICE	COUNTY	STATE
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Flowers for Lasting Beauty

Flowers of lasting beauty are the perennials. They bloom the second year, and every year thereafter with very little attention. We list only a few here, but you will find many more in the pages of this catalog. No garden is complete without a few of these choice flowers that come back year after year.



Oriental Poppy



Coreopsis

ORIENTAL POPPIES

Hybrids, New Mixture. A favorite in any perennial garden. The flowers cre of an immense size, 6 inches and over. on long stems, of many novel colors. See culture on page 49.

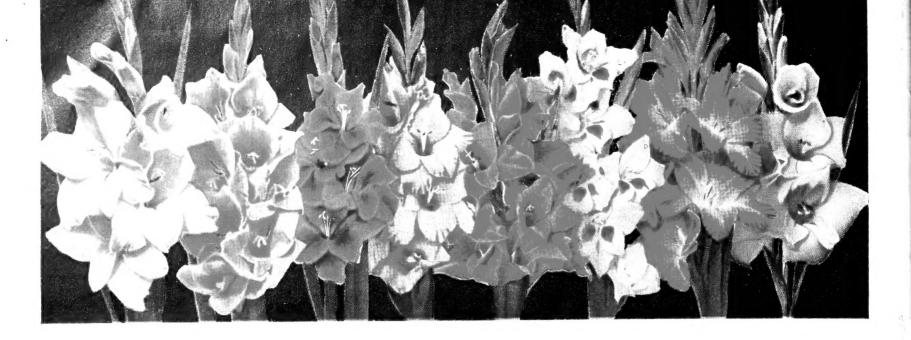
COREOPSIS

A useful and attractive perennial, both for border and cut flowers. They are of easy culture, and flower in profusion throughout the summer. This is one of the finest with large, showy, bright yellow flowers produced in the greatest abundance from June until frost. See page 43.



AQUILEGIA (Columbine)

MRS. SCOTT ELLIOTT'S STRAIN OF LONG SPURRED HYBRIDS. This beautiful plant thrives in all kinds of soil; graceful foliage. flowers abundantly from early May until the last of June. See page 43.





Choice Gladiolus

GRAND RIVER COLLECTION of Gladioli

- 10 Bagdad. Smoky rose.
- 10 Pelegrina. Deep blue.
- 10 Hindenburg's Memory. Dark red.
- 10 Gardenia. Creamy white.
- 10 Bit O' Heaven. Orange.
- 10 Picardy. Pink.
- 10 Maid of Orleans. Milky white.
- 10 Lavender Queen. Lavender.
- 10 Jonquil. Clear deep yellow.
- 10 Rocket. Flaming scarlet.

During the past season the demand for these bulbs has been tremendous, so we would suggest your early orders.

Please allow us to substitute other varieties, if we are sold out when your order is received.

Subject to 3 % Michigan State Sales Tax

All our Gladiolus are listed on page 44.

GRAND RAPIDS GROWERS

INC.

401-433 Ionio Ave., S. W. GRAND RAPIDS, MICHIGAN